

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 4, 2004, 15:51:18 ; Search time 64 Seconds  
(without alignments)  
5280.705 Million cell updates/sec

Title: US-10-021-323-13

Perfect score: 609

Sequence: 1 ggtaagaaatcaactttt.....tgaagctntacaattaagg 609

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA:\*

- 1: /cgn2\_6/ptodata/2/ina/5A COMB.seq.\*
- 2: /cgn2\_6/ptodata/2/ina/5B COMB.seq.\*
- 3: /cgn2\_6/ptodata/2/ina/6A COMB.seq.\*
- 4: /cgn2\_6/ptodata/2/ina/6B COMB.seq.\*
- 5: /cgn2\_6/ptodata/2/ina/PTUS COMB.seq.\*
- 6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	51.6	8.5	7218	1	US-08-232-463-14
C 2	40	6.6	1052	1	US-08-466-603-1
C 3	40	6.6	1052	1	US-08-314-503A-1
C 4	40	6.6	1052	1	US-08-468-066-1
C 5	40	6.6	1052	2	US-08-466-717-1
C 6	40	6.6	1052	3	US-08-466-743-1
C 7	40	6.6	1052	5	PCT-US95-12414-1
C 8	39.8	6.5	289	3	US-09-007-005-17
C 9	39.8	6.5	289	3	US-09-244-796-17
C 10	39.6	6.5	3955	4	US-09-976-594-207
C 11	37.8	6.2	966	2	US-08-766-738-2
C 12	37.8	6.2	966	4	US-09-262-610-2
C 13	36.2	5.9	1965	3	US-09-178-252-26
C 14	36.2	5.9	1965	4	US-09-826-660-26
C 15	35.6	5.8	3211	2	US-08-574-959A-8
C 16	35.6	5.8	3211	3	US-09-357-014-8
C 17	35.6	5.8	3901	2	US-08-574-959A-6
C 18	35.6	5.8	3901	3	US-09-357-014-6
C 19	35.4	5.8	429	4	US-09-489-039A-349
C 20	35.4	5.8	3489	2	US-08-728-323A-1
C 21	35.4	5.8	3489	4	US-09-298-568-1
C 22	35.4	5.8	3489	4	US-09-410-399-1
C 23	35.4	5.8	32207	2	US-08-770-379-20
C 24	35.4	5.8	32207	3	US-08-757-669A-20
C 25	35.4	5.8	32207	4	US-09-230-371A-20
C 26	34.4	5.6	856	4	US-09-134-000C-3304
C 27	34.4	5.6	856	4	US-09-171-517B-15

C 28	34.4	5.6	4161	4	US-09-185-244-8
C 29	34.4	5.6	4161	4	US-09-471-913-1
C 30	34.4	5.6	12241	4	US-09-948-138-4
C 31	34.4	5.6	13737	4	US-09-538-414-10
C 32	34.4	5.6	13737	4	US-10-074-279-10
C 33	33.6	5.5	2082	3	US-09-440-325A-2
C 34	33.6	5.5	2082	4	US-09-846-996A-2
C 35	33.6	5.5	7183	4	US-09-081-149-9
C 36	33.6	5.5	7183	4	US-09-081-149-10
C 37	33.4	5.5	2277	1	US-08-676-967-2
C 38	33.4	5.5	2277	1	US-08-676-974-2
C 39	33.4	5.5	2277	2	US-09-098-487-2
C 40	33.2	5.5	3624	1	US-07-951-715A-6
C 41	33.2	5.5	3624	2	US-08-459-448A-6
C 42	33.2	5.5	3624	3	US-08-459-595A-6
C 43	33.2	5.5	3624	3	US-08-459-504B-6
C 44	33.2	5.5	3624	3	US-08-459-444-6
C 45	33.2	5.5	3624	3	US-09-053-549-7

ALIGNMENTS

RESULT 1  
US-08-232-463-14  
Sequence 14, Application US/08232463  
Patent No. 5670367  
GENERAL INFORMATION:  
APPLICANT: DORNER, F.  
APPLICANT: SCHEIFLINGER, F.  
APPLICANT: FALKNER, P. G.  
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS  
NUMBER OF SEQUENCES: 52  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Foley & Lardner  
STREET: 1800 Diagonal Road, Suite 500  
CITY: Alexandria  
STATE: VA  
COUNTRY: USA  
ZIP: 22313-0299  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/232,463  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/07/935,313  
FILING DATE:  
APPLICATION NUMBER: EP 91 114 300.6  
FILING DATE: 26-AUG-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: BENT, Stephen A.  
REGISTRATION NUMBER: 29,768  
REFERENCE/DOCKET NUMBER: 30472/114 IMM  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (703)836-9300  
TELEFAX: (703)683-4109  
TELEX: 899149  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 7218 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
CLONE: pTZgpt-Fls  
US-08-232-463-14

Query Match 8.5%; Score 51.6; DB 1; Length: 7218;

Martine 61  
10/02/323 Page 1  
Seq. ID 13 issued  
Pub dB

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Best Local Similarity 3.8%; Pred. No. 8.2e-06;
Matches 15; Conservative 221; Mismatches 160; Indels 0; Gaps 0;

QY 140 GCTCTCTCAGTCTTTCCACTATTTTCCACTCAGTCTTCCAGCAGTATTC 199
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
1058 GCTGCGATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1117
Db : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 200 AAGTCTCTCATGCCCGCCAGCCATCCCATCAAGTCAACACTTTAAAGCCTTGC 259
: : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1118 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1177
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 260 AAGTCTACTCTCTCTTCTTCCAGCGCGCGTGAATGACCAATTCCTCTCTCTC 319
: : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1178 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1237
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 320 GTCACCACTGTCAGTGGTTCAGATGATCATATAAGAACCAAGTATCATCAA 379
: : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1238 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1297
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 380 GTTCAACATGGTTTCCCACTAAGGCTCCAAATCTTCAAGCTGAATGGACAGACC 439
: : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1298 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1357
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 440 GATTTCTGAGCAACCAATTCAGTCTCTCAGACTAAGCAATCTCCATCTTGTG 499
: : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1358 YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY 1417
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QY 500 GAGCTTCTCGATACGCGTGTGCAAGTGGTCTTACT 535
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Db 1418 YYYYYYYYYYYYYYGTACCAAAATCTCTATCT 1453
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RESULT 2

```

US-08-466-603-1/c
; Sequence 1, Application US/08466603
; Patent No. 5726018
; GENERAL INFORMATION:
; APPLICANT: Pasternack, Gary R.
; APPLICANT: Kuhajda, Francis P.
; TITLE OF INVENTION: No. 5726018el Mammalian Protein Associated With
; TITLE OF INVENTION: Uncontrolled Cell Division
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Banner, Birch, McKie & Beckett
; STREET: 1001 G Street, N.W.
; CITY: Washington, D.C.
; STATE: District of Columbia
; COUNTRY: U.S.A.
; ZIP: 20001
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/466.603
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/314,503
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Posorske Esq., Laurence H.
; REGISTRATION NUMBER: 34,698
; REFERENCE/DOCKET NUMBER: 1107.47218
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202 508-9153
; TELEFAX: 202 508-9299
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1052 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear

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; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 97..843
; US-08-466-603-1

Query Match 6.6%; Score 40; DB 1; Length 1052;
Best Local Similarity 46.7%; Pred. No. 0.013;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGATGTAACATCAATGTTTGAATTTCTGAAATCAACCATCGCGTCTGATTT 118
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
Db 879 ACAATAGGAATTTTTCAAAATAGGTTATTCACATAGTATCTTCTCCCTCATCTTC 820
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 119 GGTGTCTGTAATACCAATCATGCTCTGCACTCTTTTCCACTATTTTCACTCACAATACC 178
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
Db 819 AGTTCTCGTTTGGCTTCTGACCCCTTTCTTCTCAGCAGCTCTTCTTCTCATCTTCTC 760
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 179 CAGTCTTCCAGCAGTATTCAGCTCCTCACAATCCCAACCCATCCCAATTCAGATC 238
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
Db 759 GTCACTTACCTTCCATCGTTATAAACCCTTCTCATCTCTCTCTCTCTCCACTCAAGTC 700
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 239 AAACACTTTAAAGCCTTCGCAAGTCACTGCTCTTCTTCTTCCAGCGCGGCTCAATGAC 298
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
Db 699 CTCCTCTTCACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
: : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
||| | : : : : : : : : : : : : : : : : : : : : : : : : :
Db 639 TTCATCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608
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RESULT 3

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US-08-314-503A-1/c
; Sequence 1, Application US/08314503A
; Patent No. 5734022
; GENERAL INFORMATION:
; APPLICANT: Pasternack, Gary R.
; APPLICANT: Kuhajda, Francis P.
; TITLE OF INVENTION: No. 5734022el Mammalian Protein Associated With
; TITLE OF INVENTION: Uncontrolled Cell Division
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Banner, Birch, McKie & Beckett
; STREET: 1001 G Street, N.W.
; CITY: Washington, D.C.
; STATE: District of Columbia
; COUNTRY: U.S.A.
; ZIP: 20001
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/314,503A
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Posorske Esq., Laurence H.
; REGISTRATION NUMBER: 34,698
; REFERENCE/DOCKET NUMBER: 1107.47218
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202 508-9153
; TELEFAX: 202 508-9299
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1052 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear

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/ LENGTH: 1052 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: cdna
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 97..843
US-08-466-717-1

Query Match
Best Local Similarity 6.6%; Score 40; DB 2; Length 1052;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGAATGTAACATCATGTTTGAATTTCTTGAAATCAACCATGCCGCTGAATT 118
Db 879 ACAATAGGAATTTTTCAMAAATAGGTTATTCCACTTAGTCATCATCTTCTCCCTCATCTTC 820
QY 119 GGTGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTGCATTCACATACC 178
Db 819 AGTTCTCGTTTTCGCTTCGACCCCTTTCTTTCACCAAGCTCTTTCATCTTCTTC 760
QY 179 CAGTCTTCCAGCAGTATTCAAGCTCTTCACATCCCCCAACCCATCCCAATCAAGTC 238
Db 759 GTCACTACCTCTCCATCGTTATACCTTCTTCATCTCTCTCTCTCTCTCTCTCTCT 700
QY 239 AAACACTTTAAAGCTTCGCAAGTCACTGTCCTTCTTTCACGCGCGCCGTAATGAC 298
Db 699 CTCCTCTTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db 639 TTCATCATACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

RESULT 6
US-08-466-743-1/c
Sequence 1, Application US/08466743
Patent No. 6040173
GENERAL INFORMATION:
APPLICANT: Pasternack, Gary R.
APPLICANT: Kuhajda, Francis P.
TITLE OF INVENTION: No. 6040173el Mammalian Protein Associated With
TITLE OF INVENTION: Uncontrolled Cell Division
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Banner, McKie & Beckett
STREET: 1001 G Street, N.W.
CITY: Washington, D.C.
STATE: District of Columbia
COUNTRY: U.S.A.
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,743
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/314,503
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Posorske Esq., Laurence H.
REGISTRATION NUMBER: 34,698
REFERENCE/DOCKET NUMBER: 1107.47218
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 508-9299
TELEFAX: 202 508-9153
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/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 1052 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: cdna
/ ORIGINAL SOURCE:
/ ORGANISM: Homo sapiens
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: 97..843
US-08-466-743-1

Query Match
Best Local Similarity 6.6%; Score 40; DB 3; Length 1052;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY 59 AGAAGCGGAATGTAACATCATGTTTGAATTTCTTGAAATCAACCATGCCGCTGAATT 118
Db 879 ACAATAGGAATTTTTCAMAAATAGGTTATTCCACTTAGTCATCATCTTCTCCCTCATCTTC 820
QY 119 GGTGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTGCATTCACATACC 178
Db 819 AGTTCTCGTTTTCGCTTCGACCCCTTTCTTTCACCAAGCTCTTTCATCTTCTTC 760
QY 179 CAGTCTTCCAGCAGTATTCAAGCTCTTCACATCCCCCAACCCATCCCAATCAAGTC 238
Db 759 GTCACTACCTCTCCATCGTTATACCTTCTTCATCTCTCTCTCTCTCTCTCTCTCT 700
QY 239 AAACACTTTAAAGCTTCGCAAGTCACTGTCCTTCTTTCACGCGCGCCGTAATGAC 298
Db 699 CTCCTCTTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 640
QY 299 CAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db 639 TTCATCATACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

RESULT 7
PCT-US95-12414-1/c
Sequence 1, Application PC/TUS9512414
GENERAL INFORMATION:
APPLICANT: Pasternack, Gary R.
APPLICANT: Kuhajda, Francis P.
TITLE OF INVENTION: Novel Mammalian Protein Associated With
TITLE OF INVENTION: Uncontrolled Cell Division
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Banner & Allegretti, Ltd.
STREET: 1001 G Street, N.W.
CITY: Washington, D.C.
STATE: District of Columbia
COUNTRY: U.S.A.
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/12414
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/314,503
FILING DATE: 22-SEP-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hoscheit Esq., Dale H.
REGISTRATION NUMBER: 19,090
REFERENCE/DOCKET NUMBER: 1107.51507
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 508-9153
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; TELEFAX: 202 508-9299
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1052 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 97..843
PCT-US95-12414-1

Query Match          6.6%; Score 40; DB 5; Length 1052;
Best Local Similarity 46.7%; Pred. No. 0.013;
Matches 127; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

QY      59 AGAAGCGGAATGTAACATCATGTGTTTTTGAATCTTTGAAATCAACCAATGCCGTCTGAATT 118
Db      879 ACAATAGGAATTTTCAAAATAGGTATATCCACTTAGTCATCATCTTCTCCCTCATCTTC 820

QY     119 GGGTGCGTAATACCAAATCATGCTCCTGCAGTCTTTTCCACTATTTTCACTCATATACC 178
Db     819 AGGTTCGCTGTTTGCGCTTCTGACCCCTTCTTCTTCCACCAAGCTCTTCTTCACTTCTC 760

QY     179 CAGTCTTCCCAGCACGATTAACAAGTCTCTCATATCCCCCCCCAACCCATCCCCCATCAAATC 238
Db     759 GTCATCTACCTCTCCATCGTATTAACCTTCTCATCTCTCTCTCTCTCTCTCTCTCAGTTC 700

QY     239 AAMACATTTAAAGCCTTCGCAAGGTCACTGTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT 298
Db     699 CTCCTCTTCACTTCTCTCTCTCTCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC 640

QY     299 CAATTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 330
Db     639 TTCATCATACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 608

RESULT 8
US-09-007-005-17/c
; Sequence 17, Application US/09007005B
; Patent No. 6258558
; GENERAL INFORMATION:
; APPLICANT: Szostak, Jack W.
; APPLICANT: Roberts, Richard W.
; APPLICANT: Liu, Rihe
; TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN
; TITLE OF INVENTION: FUSIONS
; FILE REFERENCE: 00786/350003
; CURRENT APPLICATION NUMBER: US/09/007,005B
; CURRENT FILING DATE: 1998-01-14
; EARLIER APPLICATION NUMBER: 60/035,963
; EARLIER FILING DATE: 1997-01-27
; EARLIER APPLICATION NUMBER: 60/064,491
; EARLIER FILING DATE: 1997-11-06
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 289
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Translation template
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: {1}...(289)
; OTHER INFORMATION: n = A,T,C or G
US-09-007-005-17

Query Match          6.5%; Score 39.8; DB 3; Length 289;
Best Local Similarity 8.2%; Pred. No. 0.0072;
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Db 65 YNYSNNYCYATYTYGYTAYATYTYGYTAYAYATYAYGYTAYAYTYGYTTC 6  
QY 397 CCACT 401  
Db 5 YCYCY 1

RESULT 10  
US-09-976-594-207/c  
; Sequence 207, Application US/09976594  
; Patent No. 6673549  
; GENERAL INFORMATION:  
; APPLICANT: Furness, Michael  
; APPLICANT: Buchbinder, Jenny  
; TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS  
; FILE REFERENCE: PA-0041 US  
; CURRENT APPLICATION NUMBER: US/09/976,594  
; CURRENT FILING DATE: 2001-10-12  
; PRIOR APPLICATION NUMBER: 60/240,409  
; PRIOR FILING DATE: 2000-10-12  
; NUMBER OF SEQ ID NOS: 1143  
; SOFTWARE: PERL Program  
; SEQ ID NO 207  
; LENGTH: 3955  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; OTHER INFORMATION: Incyte ID No. 6673549 1041138.7  
; NAME/KEY: unsure  
; LOCATION: 2235, 2268  
; OTHER INFORMATION: a, t, c, g, or other  
US-09-976-594-207

Query Match 6.5%; Score 39.6; DB 4; Length 3955;  
Best Local Similarity 46.3%; Pred. No. 0.036;  
Matches 126; Conservative 0; Mismatches 146; Indels 0; Gaps 0;  
QY 59 AGAAGCGGAATGATACATCATGTTTTTGAATTTCTGAAATCAACATGCCGTCTGAATT 118  
Db 2433 ACAATAGGAATTTTCAAAATAGGTATTCACCTTAGTCATCATCTCTCCCTCATCTC 2374  
QY 119 GGTGCGTAATACCAATCATGCTCTCGAGCTTTTCCACTATTTGACCTCACATACC 178  
Db 2373 AGTTCCTGTTTCCTCTGACCCCTTCTCTTCTTCCACCAAGCTCTTCTCATCTTCTTC 2314  
QY 179 CAGTCTCCAGCAGTATTCAGCTCTCTCATATCCCCCAACCCATCCCCCACTTCAAGTC 238  
Db 2313 GTCATCTACCTCTCCATCGTTATTAACCTTCTTTCATCTCTCTCTCTCTCTCTCTCT 2254  
QY 239 AAACACTTTAAAGCCTTCGAGCTCACTGCTTCTTCTTCCACCGCCGCGGTGAATGAC 298  
Db 2253 CTCCTCTTCACT 2194  
QY 299 CAATTCCT 330  
Db 2193 TTCATCATCT 2162

RESULT 11  
US-08-766-738-2/c  
; Sequence 2, Application US/08766738  
; Patent No. 5916749  
; GENERAL INFORMATION:  
; APPLICANT: Bandman, Olga  
; APPLICANT: Goli, Surya K.  
; TITLE OF INVENTION: NOVEL HUMAN PHOSPHATASE INHIBITOR PROTEIN  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto

STATE: CA  
COUNTRY: USA  
ZIP: 94304  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/766,738  
FILING DATE: Herewith  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Billings, Lucy J.  
REGISTRATION NUMBER: 36,749  
REFERENCE/DOCKET NUMBER: PF-0177 US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-855-0555  
TELEFAX: 415-845-4166  
TELEX:  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 966 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
IMMEDIATE SOURCE:  
LIBRARY: Consensus  
CLONE: 1813361  
US-08-766-738-2

Query Match 6.2%; Score 37.8; DB 2; Length 966;  
Best Local Similarity 50.8%; Pred. No. 0.061;  
Matches 90; Conservative 0; Mismatches 87; Indels 0; Gaps 0;  
QY 150 TCTTTTCCACTATTTTCACTCCATCCCATTCAGTCAACACTTTTAAAGCCTTCGCAAGTCACTG 209  
Db 836 TCTCTCTCATCATCTGTTCT 777  
QY 210 CATCCCCCAACCCATCCCATTCAGTCAACACTTTTAAAGCCTTCGCAAGTCACTG 269  
Db 776 TCATCTCTCATCTCATCTTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 717  
QY 270 TCTTCTCTTCAACCGCCGCGGTGAATGACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCA 326  
Db 716 ACTTCATCTGCTCA 660

RESULT 12  
US-09-262-610-2/c  
; Sequence 2, Application US/09262610  
; Patent No. 6428949  
; GENERAL INFORMATION:  
; APPLICANT: Bandman, Olga  
; APPLICANT: Goli, Surya K.  
; TITLE OF INVENTION: NOVEL HUMAN PHOSPHATASE INHIBITOR PROTEIN  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
; STREET: 3174 Porter Drive  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94304  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/09/262,610
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/766,738
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0177 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-845-4166
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 966 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: Consensus
; CLONE: 1813361
; US-09-262-610-2

Query Match 6.2%; Score 37.8; DB 4; Length 966;
Best Local Similarity 50.8%; Pred. No. 0.061;
Matches 90; Conservative 0; Mismatches 87; Indels 0; Gaps 0;

QY 150 TCTTTTCCACATATTTTCCACCTCATACCCAGTCTTCCCGACGATGTTTCAAGTCTCTCA 209
DB 836 TCTCTTTCATCATCTGTTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 777

QY 210 CATCCCCCAACCCATTCAGTCAACACATTTAAAGCTTCGCGAGTCACTG 269
DB 776 TCATCTCATCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 717

QY 270 TCTTCTCTTTCACGCGCGCGTGAATCAACCAATTCCTCTCTCTCTCTCTCTCTCTCTCA 326
DB 716 ATTCATCTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCA 660

RESULT 13
US-09-178-252-26
; Sequence 26, Application US/09178252
; Patent No. 6218188
; GENERAL INFORMATION:
; APPLICANT: Cardineau, Guy A.
; APPLICANT: Stelman, Steven J.
; APPLICANT: Narva, Kenneth E.
; TITLE OF INVENTION: Plant-Optimized Genes Encoding Pesticidal Toxins
; FILE REFERENCE: MA-714XC2
; CURRENT APPLICATION NUMBER: US/09/178,252
; CURRENT FILING DATE: 1998-10-23
; EARLIER APPLICATION NUMBER: 60/065,215
; EARLIER FILING DATE: 1997-11-12
; EARLIER APPLICATION NUMBER: 60/076,445
; EARLIER FILING DATE: 1998-03-02
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26
; LENGTH: 1965
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic B.t. toxin gene
; US-09-178-252-26

Query Match 5.9%; Score 36.2; DB 3; Length 1965;
Best Local Similarity 52.3%; Pred. No. 0.29;
Matches 80; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 176 ACCAGTCTTCCCGACGATTCATCAAGTCTCTCAAGTCTCTCAATCCCGCAACCATCCCAATTCAA 235
DB 1336 ACCAAGCGCGCAACACCTGCGCGCAGACTTCCACACCGAGGAGCTCCCGTGGAG 1395

QY 236 GTCAACACACTTTAAAGCCTTCGCAAGTCACTGCTTCTTCTTCAACGCGCGCGTGAAT 295
DB 1396 AACAAACACTTCAACCTCTCTCCACGTCGACCTTCTCTCCGCTTCAACACCAACCGAGGC 1455

QY 296 GACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 328
DB 1456 GGCCCACTCGGACGCTGGGGTTCTCTCCGACC 1488

RESULT 15
US-08-574-959A-8/c
; Sequence 8, Application US/08574959A
; Patent No. 5962224
; GENERAL INFORMATION:
; APPLICANT: Jaekyoon Shin, Insil Jeung, Ratna K. Vadlamudi
; APPLICANT: and Jack L. Strominger
; TITLE OF INVENTION: P62 POLYPEPTIDES, RELATED POLYPEPTIDES
; TITLE OF INVENTION: AND USES THEREFOR
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, Suite 510
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA

Query Match 5.9%; Score 36.2; DB 3; Length 1965;
Best Local Similarity 52.3%; Pred. No. 0.29;
Matches 80; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 176 ACCAGTCTTCCCGACGATTCATCAAGTCTCTCAAGTCTCTCAATCCCGCAACCATCCCAATTCAA 235
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DB 1336 ACCAAGCGCGCAACACCTGCGCGCAGACTTCCACACCGAGGAGCTCCCGTGGAG 1395

QY 236 GTCAACACACTTTAAAGCCTTCGCAAGTCACTGCTTCTTCTTCAACGCGCGCGTGAAT 295
DB 1396 AACAAACACTTCAACCTCTCTCCACGTCGACCTTCTCTCCGCTTCAACACCAACCGAGGC 1455

QY 296 GACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 328
DB 1456 GGCCCACTCGGACGCTGGGGTTCTCTCCGACC 1488

RESULT 14
US-09-826-660-26
; Sequence 26, Application US/09826660
; Patent No. 5673990
; GENERAL INFORMATION:
; APPLICANT: Cardineau, Guy A.
; APPLICANT: Stelman, Steven J.
; APPLICANT: Narva, Kenneth E.
; TITLE OF INVENTION: Plant-Optimized Genes Encoding Pesticidal Toxins
; FILE REFERENCE: MA-714XC2D1
; CURRENT APPLICATION NUMBER: US/09/826,660
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/178,252
; PRIOR FILING DATE: 1998-10-23
; PRIOR APPLICATION NUMBER: 60/065,215
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/076,445
; PRIOR FILING DATE: 1998-03-02
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26
; LENGTH: 1965
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic B.t. toxin gene
; US-09-826-660-26

Query Match 5.9%; Score 36.2; DB 4; Length 1965;
Best Local Similarity 52.3%; Pred. No. 0.29;
Matches 80; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 176 ACCAGTCTTCCCGACGATTCATCAAGTCTCTCAAGTCTCTCAATCCCGCAACCATCCCAATTCAA 235
DB 1336 ACCAAGCGCGCAACACCTGCGCGCAGACTTCCACACCGAGGAGCTCCCGTGGAG 1395

QY 236 GTCAACACACTTTAAAGCCTTCGCAAGTCACTGCTTCTTCTTCAACGCGCGCGTGAAT 295
DB 1396 AACAAACACTTCAACCTCTCTCCACGTCGACCTTCTCTCCGCTTCAACACCAACCGAGGC 1455

QY 296 GACCAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 328
DB 1456 GGCCCACTCGGACGCTGGGGTTCTCTCCGACC 1488

RESULT 15
US-08-574-959A-8/c
; Sequence 8, Application US/08574959A
; Patent No. 5962224
; GENERAL INFORMATION:
; APPLICANT: Jaekyoon Shin, Insil Jeung, Ratna K. Vadlamudi
; APPLICANT: and Jack L. Strominger
; TITLE OF INVENTION: P62 POLYPEPTIDES, RELATED POLYPEPTIDES
; TITLE OF INVENTION: AND USES THEREFOR
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, Suite 510
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
```

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; ZIP: 02109-1875
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/574,959A
; FILING DATE: 19-DEC-95
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragouras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: DEN-008
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3211 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 439..3157
; US-08-574-959A-8

Query Match      5.8%; Score 35.6; DB 2; Length 3211;
Best Local Similarity 49.5%; Pred. No. 0.59;
Matches 92; Conservative 0; Mismatches 94; Indels 0; Gaps 0;

QY 150 TCTTTTCCACTATTTTCACCTCACATACCCAGCTCTTCCGACGACGTATTCAGCTCTCTCA 209
DB   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
2609 TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2550
QY 210 CATCCCCCACCACCCATCCCATTCAGTCAACACACTTTAAAGCCCTTCGCAAGGTCACTG 269
DB   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
2549 TCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2490
QY 270 TCTTCTCTCTCACCGCCGCGGTAATGACCAATTCCTCTCTCTCTCTCTCTCTCTCTCT 329
DB   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
2489 TCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 2430
QY 330 TGTGGC 335
DB   ||| |||
2429 TCTTCC 2424
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Search completed: August 4, 2004, 16:55:52  
Job time : 65 secs



Result No.	Score	Query Match	Length	DB	ID	Description
1	608	99.8	609	17	US-10-021-323-13	Sequence 13, Appl
2	463.2	76.1	610	17	US-10-021-323-225	Sequence 225, App
3	188.2	30.9	876	13	US-10-424-599-6121	Sequence 6121, Ap
4	146.6	24.1	856	13	US-10-424-599-41231	Sequence 41291, A
5	81.2	13.3	381	9	US-09-770-751-166	Sequence 166, App
6	75.8	12.4	591	17	US-10-437-963-79711	Sequence 79711, A
7	73	12.0	1037	13	US-10-425-114-23005	Sequence 23005, A
8	68	11.2	266	13	US-10-424-599-4057	Sequence 4057, Ap
9	65	10.7	1093	13	US-10-424-599-5364	Sequence 5364, Ap
10	63.2	10.4	441	17	US-10-437-963-77254	Sequence 77254, A
11	61.6	10.1	1058	13	US-10-424-599-113581	Sequence 113581, A
12	60.2	9.9	519	17	US-10-437-963-20735	Sequence 20735, A
13	60.2	9.9	840	17	US-10-437-963-66273	Sequence 66273, A
14	59.8	9.8	1924	13	US-10-424-599-23473	Sequence 23473, A

Db 61 AACGGGAATGAACATCATGTTTGAATTTCTGAAATCAACCATGCGTCTGAATTGG 120  
Qy 121 TGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTCACTCATACATACCA 180  
Db 121 TGTGTAATACCAATCATGCTCTGAGTCTTTTCCACTATTTTCACTCATACATACCA 180  
Qy 181 GTCTTCCAGCAGTAATTAAGCTCTCACTCATCCGCCCAACCCATCCCATTAAGTCAA 240  
Db 181 GTCTTCCAGCAGTAATTAAGCTCTCACTCATCCGCCCAACCCATCCCATTAAGTCAA 240  
Qy 241 ACACCTTAAAGCCCTTCGCAAGGTCACTGTCTTCTTCACTGCGCGCGGTGAATGACCA 300  
Db 241 ACACCTTAAAGCCCTTCGCAAGGTCACTGTCTTCTTCACTGCGCGCGGTGAATGACCA 300  
Qy 301 ATTCTCTCTCTCTCTCTGTCACCAATGCGAGTGGGTTCGAGATGAATTCATAAA 360  
Db 301 ATTCTCTCTCTCTCTCTGTCACCAATGCGAGTGGGTTCGAGATGAATTCATAAA 360  
Qy 361 AGACACGAATTCATCCAAAGTTCACCAATGCTTCCCACTAAAGGCTCCAAATCTTCAA 420  
Db 361 AGACACGAATTCATCCAAAGTTCACCAATGCTTCCCACTAAAGGCTCCAAATCTTCAA 420  
Qy 421 GCTGTAATTCGACAGCCGATCTCTCGAGCAACCAATTCAGCTCCCTCCAGCTAAAG 480  
Db 421 GCTGTAATTCGACAGCCGATCTCTCGAGCAACCAATTCAGCTCCCTCCAGCTAAAG 480  
Qy 481 AGCCATCTCCATCTCTGTCGAGCTTCTCGAATAOCGTTGCAAGTGGTCTTACTAAGG 540  
Db 481 AGCCATCTCCATCTCTGTCGAGCTTCTCGAATAOCGTTGCAAGTGGTCTTACTAAGG 540  
Qy 541 GGGACATTTTACCAACCAAGGATATGATCACTCAACATCAACCTTGAAGCTTAC 600  
Db 541 GGGACATTTTACCAACCAAGGATATGATCACTCAACATCAACCTTGAAGCTTAC 600  
Qy 601 AAATTAAGG 609  
Db 601 AAATTAAGG 609

## RESULT 2

US-10-021-323-225/c  
; Sequence 225, Application US/10021323  
; Publication No. US20040123340A1  
; GENERAL INFORMATION:  
; APPLICANT: Deikman, Jill  
; APPLICANT: Feng, Paul C.C.  
; APPLICANT: Fincher, Karen L.  
; APPLICANT: Ziegler, Todd E.  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
; FILE REFERENCES: 38-21(52274)B  
; CURRENT APPLICATION NUMBER: US/10/021,323  
; PRIOR FILING DATE: 2001-12-12  
; PRIOR APPLICATION NUMBER: US 60/255, 619  
; PRIOR FILING DATE: 2000-12-14  
; NUMBER OF SEQ ID NOS: 17880  
; SEQ ID NO 225  
; LENGTH: 610  
; TYPE: DNA  
; ORGANISM: Gossypium hirsutum  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1)..(610)  
; OTHER INFORMATION: unsure at all n locations  
; OTHER INFORMATION: Clone ID: LIB3825-002-Q1-X6-B5  
US-10-021-323-225

Query Match 76.1%; Score 463.2; DB 17; Length 610;

Best Local Similarity 94.5%; Pred. No. 1.1e-136;  
Matches 500; Conservative 0; Mismatches 26; Indels 3; Gaps 2;

Qy 82 TTTTGAATTTCTGAAATCAACCATGCGTCTGAAATTTGTTGTAATACCAATCATGCG 141

Db 604 TTTTGAATTTCTGAAATCAACCATGCGTCTGAAATTTGTTGTAATACCAATCATGCG 545  
Qy 142 TCTGCACTCTTTTCCACTATTTTCACTCATACCACTGCTTCCAGCAGTATTCAA 201  
Db 544 TTTTGAATTTCTGAAATCAACCATGCGTCTGAAATTTGTTGTAATACCAATCATGCG 485  
Qy 202 GCTCTCATCATCCGCCCAACCCATCCCATTAAGTCAACCACTTTTAAAGCCTTTCGCAA 261  
Db 484 GCTCTCATCATCCGCCCAACCCATCCCATTAAGTCAACCACTTTTAAAGCCTTTCGCAA 425  
Qy 262 GCTCACTCTTTTCTTCTTCAACCGCGCGGTGAATGACCAATTCCTCTCTCTTCTG 321  
Db 424 GCTCACTCTTTTCTTCTTCAACCGCGCGGTGAATGACCAATTCCTCTCTCTTCTG 365  
Qy 322 CACCACTCATGTCGAGTGGTTCGAGATGGAATTCATATAAGCAACCAATTCATCAAGT 381  
Db 364 CACCACTCATGTCGAGTGGTTCGAGATGGAATTCATATAAGCAACCAATTCATCAAGT 305  
Qy 382 TCAACATGTTTTCCTTCCCACTAAAGGCTCCAAATCTTCAAGGCTGAATTCAGACAGCCGA 441  
Db 304 TCAACATGTTTTCCTTCCCACTAAAGGCTCCAAATCTTCAAGGCTGAATTCAGACAGCCGA 245  
Qy 442 TTCT-CTGGAGCAACCAATTCAGCTCCCTCCAGCTAAAGTGGTCTTCTTCTTCTG 500  
Db 244 TTCTGCTGAGCAACCAATTCAGCTCCCTCCAGCTAAAGTGGTCTTCTTCTTCTG 187  
Qy 501 AGCTTCTCGAATACGCTTTCGAGTGGTTCGAGTGGTCTTCTTCTTCTTCTTCTTCTG 560  
Db 186 AGCTTCTCGAATACGCTTTCGAGTGGTTCGAGTGGTCTTCTTCTTCTTCTTCTTCTG 127  
Qy 561 AGGATATGATCACCATTAAACATCAACCTTGAAGCTTACAAATTAAGG 609  
Db 126 AGGATATGATCACCATTAAACATCAACCTTGAAGCTTACAAATTAAGG 78

## RESULT 3

US-10-424-599-6121/c  
; Sequence 6121, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yinhua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Uses Thereof for Plant Improvement  
; FILE REFERENCES: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 6121  
; LENGTH: 876  
; TYPE: DNA  
; ORGANISM: Glycine max  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1)..(876)  
; OTHER INFORMATION: unsure at all n locations  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_105537C.1  
US-10-424-599-6121

Query Match 30.9%; Score 188.2; DB 13; Length 876;  
Best Local Similarity 63.2%; Pred. No. 7e-49;  
Matches 324; Conservative 0; Mismatches 183; Indels 6; Gaps 2;

Qy 50 AATAACTCAAGAACGGGAATGATACATCATGTTTGAATTTCTTGAATCAACCATGCG 109  
Db 640 AAACAATCATGAAGTTGTAAGAACATCATGCTTAAACTCTGAAATCAAGCTTGGC 581  
Qy 110 GTCTGAATTTGTTGTTGTAATACCAATCATGCTCTGAGTCTTTTCA---CTATTTC 166

Db 580 ATCAAGGTAGTGTATAGAGCAAAATCATGATGACAAATCTTTGGCCACACCTTTTCATC 521  
Qy 167 ACCTCAGATCCAGTCTTCCAGCAGCTATTCAGAGCTCTCAGATCCCGCCCAAGCCATC 226  
Db 520 ATCCCATGTCAGGCTTTTCAACACACACTCAAGCTCTTGGCTTGTGATGAACCCATC 461  
Qy 227 CCATTCAGTCAACACATTTAAAGCCCTTCCAGAGTCACTGTCTCTCTCTTCAACCGCC 286  
Db 460 ATCATCCAAATCAACACCTTGAAGCTTGAAGAGTCCCTCTCCACTTCTCTCAACCTC 401  
Qy 287 GCGGTGATGACCAATTCCT 346  
Db 400 ATCATATCATCCCGCCCACTAGCCCTAAATTCCTTCTCTCTCTCTCTCTCTCTCTCT 341  
Qy 347 GATGATTCATAAAGAAACAAGATTCATCAAGTTCAAAGTTCAAAGTTCCTTCCCAAGGG 406  
Db 340 CCTAGATTCATAAAGAAACAAGATTCATCAAGTTCAAAGTTCCTTCTCTCTCTCTCTCT 281  
Qy 407 CTCAATTCCTCAAGGCTGAATTTGACAGACCCGATTCCTCTGAGCAACCAATTCAGCTC 466  
Db 280 CTCAATTCCTCAATGCTATAACCGA---ACCTGCTCTCTCTCTCTCTCTCTCTCTCTCT 224  
Qy 467 CTCAGACTACAGAGCCATCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 526  
Db 223 CTCAAGGCTCAAAAACCCATCCGCTTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 164  
Qy 527 GGTCTTACTAAGGGGGACATTTTACCACCAA 559  
Db 163 ACTCGGTGTAGTGACACATTTTGTACAAA 131

RESULT 4  
US-10-424-599-41291/c  
; Sequence 41291, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; PRIORITY FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 41291  
; LENGTH: 856  
; TYPE: DNA  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_137288C.1  
US-10-424-599-41291

Query Match 24.1%; Score 146.6; DB 13; Length 856;  
Best Local Similarity 57.9%; Pred. No. 1.3e-35;  
Matches 303; Conservative 0; Mismatches 184; Indels 36; Gaps 1;  
Qy 54 ACTCAAGACGGGAATGTAAATCATCTCTCTGAGTCTTTTCCACTATTTTCACTTACCTCAC 113  
Db 543 ATTCAAGCTTTGGTGAGCAATCATCTGCTTTGAAATTCCTGAAATTCAGGCGACCATCG 484  
Qy 114 GAATTTGCTGTAATACCAATCATCTCTGAGTCTTTTCCACTATTTTCACTTACCTCAC 173  
Db 483 AATTTGCTGTCATGAACGATCATCTGCTTCTGATCTCTTGGCATGTGTTGATTCACG 424  
Qy 174 ATACCCAGTCTTCCAGCAGATTCAGGCTCTTCACTATCCCGCCCAACCCATCCCGATTC 233  
Db 423 AAGCCAGGCTCTTCAAGACAGACTCAAGGCTCTTGGCTTGTGATGAAGAACCATCTCTCGTCC 364  
Qy 234 AAGTCAACACTTTTAAAGCCTTCCAGGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 293  
Db 363 AAGTCAACACTCTTAAAGCCTTGGCGAGGTGCT----- 329

Qy 294 ATGACCAATTCCTCTCTCTCTCTCTCTCTCTCAACCATGTCGAGTGGGTTCAGATGGAT 353  
Db 328 -----CTCAACTCACTTCT 280  
Qy 354 TCATAAAGAAACAAGAAATTCATCCAAATTCAAACATGGTTTCCCACTAAGGGCTCCAAT 413  
Db 279 TTGTAAGAAACAAGAAATTCATGAAACCAAGACTTTCTTTTCCCAAGTATTTCCAAC 220  
Qy 414 TCTTCAAGGCTGAATTTGACAGACCCGATTCCTCTGAGCAACCAATTCAGTCTCTCCAGA 473  
Db 219 TCTTCTATCTATTTGGAAATTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 160  
Qy 474 CTACGAAGCCATCTCCCACT 533  
Db 159 CTCACCAATCT 100  
Qy 534 CTAGGGGGGACATTTTACCCAAAGAGGATATGATCACCAT 576  
Db 99 GTTAGGAGACATATTTTGCAATAACATCAATTTTAAAGCCT 57

## RESULT 5

US-09-770-791-166  
; Sequence 166, Application US/09770791  
; Patent No. US20020062014A1  
; GENERAL INFORMATION:  
; APPLICANT: Goriach, Jörn  
; APPLICANT: An, Yong-Qiang  
; APPLICANT: Hamilton, Carol M.  
; APPLICANT: Price, Jennifer L.  
; APPLICANT: Raines, Tracy M.  
; APPLICANT: Yu, Yang  
; APPLICANT: Rameaka, Joshua G.  
; APPLICANT: Page, Amy  
; APPLICANT: Matthew, Abraham V.  
; APPLICANT: Ledford, Brooke L.  
; APPLICANT: Moessner, Jeffrey P.  
; APPLICANT: Haas, William David  
; APPLICANT: Garcia, Carlos A.  
; APPLICANT: Kricker, Maja  
; APPLICANT: Slader, Ted  
; APPLICANT: Allen, Keith R.  
; APPLICANT: Hoffman, Neil  
; APPLICANT: Hurbán, Patrick  
; TITLE OF INVENTION: Expressed Sequences of Arabidopsis  
; TITLE OF INVENTION: thaliana  
; FILE REFERENCE: 2029 (PARA-018PRV)  
; CURRENT APPLICATION NUMBER: US/09/770,791  
; PRIORITY FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: 60/178,480  
; PRIOR FILING DATE: 2000-01-27  
; NUMBER OF SEQ ID NOS: 999  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 166  
; LENGTH: 381  
; TYPE: DNA  
; ORGANISM: Arabidopsis thaliana  
US-09-770-791-166

Query Match 13.3%; Score 81.2; DB 9; Length 381;  
Best Local Similarity 61.2%; Pred. No. 5.4e-15;  
Matches 131; Conservative 0; Mismatches 83; Indels 0; Gaps 0;  
Qy 68 ATGTAACATCATGTTTGTGAATTCCTGAAATCAACCATGCGTCTGAAATTTGGTGTCTA 127  
Db 167 ATGTAAGATCATGTTTGTGAATTCCTCAAGTCAACAAACCATCAAGATTTCTGTATG 226  
Qy 128 ATACCAATCATGCTCTCTGAGTCTTTTTCACATNTTTTCACTTCCATACCATGCTTTC 187  
Db 227 AACTCGAATCATTTCTCCCAATCCCAAGGCTTTGCGCTCTCTCTCAAAACCCCTGCGGTC 286

QY 188 CAGCAGGTATTCAAGCTCTCTGACATCCCCCAACCCATCCCACTTCAAGTCAAAACATTT 247  
Db 287 CAAACATCAAGAGCTCTCTCGCTGAAATATAAGCAATCTCGGTTTCACATCGAACAATT 346  
QY 248 AAAAGCCCTTCGCAAGGTCACATGCTCTTCTTCTTCTCA 281  
Db 347 AAAAGCCCTTCGCAATCGCTTCATCATATTATCACA 380

## RESULT 6

```

US-10-437-963-79711/c
/ Sequence 79711, Application US/10437963
/ Publication No. US20040123343A1
/ GENERAL INFORMATION:
/ APPLICANT: La Rosa, Thomas J.
/ APPLICANT: Kowalic, David K.
/ APPLICANT: Zhou, Yihua
/ APPLICANT: Cao, Yongwei
/ APPLICANT: Wu, Wei
/ APPLICANT: Boukharov, Andrey A.
/ APPLICANT: Barbazuk, Brad
/ APPLICANT: Li, Ping
/ TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
/ TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
/ FILE REFERENCE: 38-21(53221)B
/ CURRENT APPLICATION NUMBER: US/10/437,963
/ CURRENT FILING DATE: 2003-05-14
/ NUMBER OF SEQ ID NOS: 204966
/ SEQ ID NO 79711
/ LENGTH: 591
/ TYPE: DNA
/ ORGANISM: Oryza sativa
/ FEATURE:
/ OTHER INFORMATION: Clone ID: PAT_MRT4530_79404C.1
US-10-437-963-79711

```

Query Match	12.4%	Score	75.8	DB	17	Length	591
Best Local Similarity	49.5%	Pred. No.	3.8e-13				
Matches	225	Conservative	0	Mismatches	227	Indels	3
Gaps	1						
QY	74	CATCATGTTTTTGAATTTCTTGAAATCAACCATGCGCTCTGAATTTGGTGTGTAATACCA	133				
Db	561	CATCATCTGAGAGAACTCGTGGAGTTCAGCGCGCGTTCGCCGTTCGGGTGAGACTCGGCC	502				
QY	134	AATCATGTCCTCGAGTCTTTTTCACATATTTTCACTTCACTACATACCCAGTCTTCCAGCAC	193				
Db	501	GATCATGCGACGGCACTCTTCGCGGTGCGGCCCTGCTTCAGCGCCACGACGCGCAGCAC	442				
QY	194	GTATTCAAGTCTCTCATCATCCCCCACAACCATCCCAATTCAGGTCAACACTTTTAAAGC	253				
Db	441	GGCGCGAGCTCGTCCACCGTGATGATACCGTTCGCGGTTCGAGTCAACACCCGGAACGC	382				
QY	254	CTTCCGAAGTCACTGTCTTTCTTCTTCAACCGCGCGCGTGAATGACCAATTTCTCTCCTC	313				
Db	381	CTCCCTCATGTTCGCGTCT	322				
QY	314	CTCTTCGTTCACCAACCATGTGCCAGTGGTTTCGAGATGGATTCATAAAGAACACAGAATTC	373				
Db	321	GTCCCGCGCGGCATCATATGAGCGGTATAGCTTCCCGAATCTCTTCGACGTTCACGCAACC	262				
QY	374	ATCCAAAGTTCAACATAGTGTTCCTCCACTAAGGGTCCAAATCTTTCAGGGCTGAATTTGGAC	433				
Db	261	GTTCGCGCTTGGCGTTCGATGTCGCGCGATCAACGCGCGCAGCTCGTTCGCGCGCACGGGA	203				
QY	434	AGACCCGATTTCTCTGAGGACCAACAAATTCAGTCTCTTCAGACTACAGAACCACTCCATT	493				
Db	202	--TCCGAGTTTCCACAGAGTCTTCCAGCTCTCTCCCGGTGATCCGCGCGTTCGCGCTT	145				
QY	494	CTGTGCGAGTTCTCGAATAACGGGTTCGAAGTCGG	528				
Db	144	CTGTGCAACAGCTCCGAACACGCGCGCCAGCTCCG	110				

## RESULT 8

US-10-424-599-4057/c  
Sequence 4057, Application US/10424599  
Publication No. US20040631072A1  
GENERAL INFORMATION:  
APPLICANT: La Rosa Thomas J  
APPLICANT: Kovacic David X  
APPLICANT: Zhou Yinhua  
APPLICANT: Cao Yingwei  
TITLE OF INVENTION: Soy Nucleic Acid  
TITLE OF INVENTION: Plants and Uses

## RESUME: 7

```

US-10-425-114-23005/c
; Sequence 23005, Application US/10425114
; Publication No. US2004003488A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 23005
; LENGTH: 1037
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3594-027-D6_FLI
US-10-425-114-23005

```

Query Match	12.0%; Score 73; DB 13; Length 1037;
Best Local Similarity	49.7%; Pred. No. 4.3e-12;
Matches 227; Conservative 0; Mismatches 215; Indels 15; Gaps 17;	
Qy	74 CATCATGTTTTCGAAATCTTTGAAATCAACCATGCGCTCTGAATTGGTGTGTAATACCA 133
Db	678 CATCATCTGCGNACTCGCGGAAGTCGACCTTGCCTGCGGTGCGGGTCCACGCGGCC 619
Qy	134 AATCATGCTCCTGAGCTTTTTCACATATTTTCACTTCAATACCCAGTCTTCCAGCAC 193
Db	618 GATCATGCGCGGCACTCTCTCGCGGTGCGGCCCTGCGCGAGCCCGCAGCGCAGCAC 559
Qy	194 GTATTCAAGTCTCTACATCCGCCCAACCCATCCCATTCACGTCAACACACTTTAAAGC 253
Db	558 CGCGCCAGCTCTGTCGGCGGTGATGATACCCGTGCGCGTGGCGTCGAACCGCGGAACGC 499
Qy	254 CTTCGAAGTCACTGTCTTCTCTTTCACGCGCGCGGTGAATACCAATTCCTCTCTCTC 313
Db	498 CTCGCCGATGTCGTCTGTCGTGCTCTCTCTC-----TCTCTCTCTCTC 454
Qy	314 CTCTTCGTCAACCACTGTCGCAGTGGGTTCGAGATGGATCTCATAAAGAACAGAAATTC 373
Db	453 CGCGGGCGCTGTCAATGATGCGCGGTAGAGTCTCCCGAACTCTCTCGCGTCCACGACCC 394
Qy	374 ATCCAAAGTTTAAACATGTTTTCCTCCACTAAGGGCTCCAAATTCCTCAAGGCTGAATTGGAC 433
Db	393 GTCGCGGTTGGCGTCCACGCGCGCCATCATGGAAGCGCAGCTCTGTCTGTCGCCCGCACGCC 334
Qy	434 AGACCGGATTCCTGAGGAGAACCAATTCAGTCTCTCTCCAGCTAAACGAAGGCATCTCCATT 493
Db	333 CATGCCACGTTCCGCAGCGACTCTCGCCAGCTCTCTCCGCGTATGTCGCCCGTCGCGGTC 274
Qy	494 CTTCGTCAGCTTCTCGAATACGCGTTGCAAGTCGCTC 530
Db	273 CTTCGTCGAACAGCTCGAAACAGCGCGCCAGCTCTCGCC 237

FILE REFERENCE: 38-21(53223)B  
 CURRENT APPLICATION NUMBER: US/10/424,599  
 CURRENT FILING DATE: 2003-04-28  
 NUMBER OF SEQ ID NOS: 285684  
 SEQ ID NO 4057  
 LENGTH: 266  
 TYPE: DNA  
 ORGANISM: Glycine max  
 FEATURE:  
 NAME/KEY: unsure  
 LOCATION: (1)-(266)  
 OTHER INFORMATION: unsure at all n locations  
 FEATURE:  
 OTHER INFORMATION: Clone ID: PAT\_MRT3847\_103669C.1  
 US-10-424-599-4057

Query Match 11.2%; Score 68; DB 13; Length 266;  
 Best Local Similarity 64.3%; Pred. No. 7e-11;  
 Matches 117; Conservative 0; Mismatches 62; Indels 3; Gaps 1;

QY 378 AAGTTCAAACATGTTTCCCACTAAGGGCTCCAAATCTTCAAGGCTGAATGACAGAC 437  
 |||||  
 DB 263 AGTCAAGGCTCTCTTCCCACTAGAGACTCCAAATCTTCAATGCTGTAAGTCA 207  
 |||||  
 QY 438 CCGATCTCTGGAGCAACCAATTCAGCTCTCCAGACTAAGCAAGCAATCTCCATTCTTG 497  
 |||||  
 DB 206 CCGTCTCTCCAGCAGCATCTTCAGCTCTCCAGGCTCAATACCCATCCGCAATTCATG 147  
 |||||  
 QY 498 TCGAGCTCTCGAATACGGCTGCAAGTCGGTCTTACTAGGGGGGACATTTACCAACCA 557  
 |||||  
 DB 146 TCACCTGTTGAATCCCGCTTCAAGTCACTGGTGTAGGGGACACATTTTGTACACA 87  
 |||||  
 QY 558 AA 559  
 ||  
 DB 86 AA 85

## RESULT 9

US-10-424-599-5364/c  
 Sequence 5364, Application US/10424599  
 Publication No. US20040031072A1  
 GENERAL INFORMATION:  
 APPLICANT: La Rosa, Thomas J  
 APPLICANT: Kovalic David K  
 APPLICANT: Zhou Yihua  
 APPLICANT: Cao Yongwei  
 TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 FILE REFERENCE: 38-21(53223)B  
 CURRENT APPLICATION NUMBER: US/10/424,599  
 CURRENT FILING DATE: 2003-04-28  
 NUMBER OF SEQ ID NOS: 285684  
 SEQ ID NO 5364  
 LENGTH: 1093  
 TYPE: DNA  
 ORGANISM: Glycine max  
 FEATURE:  
 OTHER INFORMATION: Clone ID: PAT\_MRT3847\_104852C.1  
 US-10-424-599-5364

Query Match 10.7%; Score 65; DB 13; Length 1093;  
 Best Local Similarity 49.3%; Pred. No. 1.6e-09;  
 Matches 235; Conservative 0; Mismatches 230; Indels 12; Gaps 2;

QY 68 ATGTACATCATGTTTTCGAATCTTGAATCAACCAATCCGCTCTGAAATGCTGTA 127  
 |||||  
 DB 786 ATTCATCATCTCTTGAATCTGTTAAATGACCAATGCCATCTCCATCCATATCAAC 727  
 |||||  
 QY 128 ATACCAATCATGCTCTGAGTCTTTTCCACTATTTTCACTTCACTACCAATCCAGTCTTCC 187  
 |||||  
 DB 726 CTCTTAAATCATCTTTGACACTCTTCAATCTTTCTCCCTTCCCTTAAACCCCAAGAGT 667  
 |||||  
 QY 188 GAGCAGTATTCAGTCTCTCAGATCCCGCCCAACCCATCCCATCCCATCAAGTCAAAACATTT 247

DB 666 AAGCACCAGGCTAACTCTCCACCGAATTAAGCCCATCATTTGTCTTATCAAAACATC 607  
 |||||  
 QY 248 AAAAGCCTTCGAAAGGTCACTGTCTTCTTTCACCGCGCGGTGAATGACCAATTCCTC 307  
 |||||  
 DB 606 AAAAGCCTTCCTTCAAAATCAAGCTCTTCAATTT-----CCATAAACACACCCCTCTTT 556  
 |||||  
 QY 308 CTCCTCTCTTCTGTCACCAACCATGTGCCAGTGGGTTCGAGATGGATTCATAAAGAACAA 367  
 |||||  
 DB 555 CTATGATGATCCCTCTTACACACTCTTGTCAACGAAGCAAAACTCTTCAAAATCGAT 496  
 |||||  
 QY 368 GAATTCATCCAAAGTTCAACATGTTTTCCCACTAAGGGCTCCAAATCTTCAAGGCTCAA 427  
 |||||  
 DB 495 CAAGCGTCACTGTGGAATGCTACTTGACAAACAATATCATCCACTCTT---TGTCTGC 439  
 |||||  
 QY 428 TTGACAGACCCGATTTCTTCGAGCAACCAATTCAGCTCTCCAGACTAAGCAAGCCATC 487  
 |||||  
 DB 438 CATGAAGATTCGATGTTCTCTCAGGACTCCCTCAGCTCTCTGTTGTTATGAACCCGTC 379  
 |||||  
 QY 488 TCCATTTCTGTCAGCTTCTCGAATACGGTTCGAACTCGGTCTTACTTAAGGGGGA 544  
 |||||  
 DB 378 GCGTTTTTGTGGAATGTGGAGAACAGTTTTCTAAGCTCTTCTCTTTTGGGA 322  
 |||||

## RESULT 10

US-10-437-963-77254/c  
 Sequence 77254, Application US/10437963  
 Publication No. US20040123343A1  
 GENERAL INFORMATION:  
 APPLICANT: La Rosa, Thomas J.  
 APPLICANT: Kovalic, David K.  
 APPLICANT: Zhou, Yihua  
 APPLICANT: Cao, Yongwei  
 APPLICANT: Wu, Wei  
 APPLICANT: Boukharov, Andrey A.  
 APPLICANT: Barbazuk, Brad  
 APPLICANT: Li, Ping  
 TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With  
 TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 FILE REFERENCE: 38-21(53221)B  
 CURRENT APPLICATION NUMBER: US/10/437,963  
 CURRENT FILING DATE: 2003-05-14  
 NUMBER OF SEQ ID NOS: 204966  
 SEQ ID NO 77254  
 LENGTH: 441  
 TYPE: DNA  
 ORGANISM: Oryza sativa  
 FEATURE:  
 OTHER INFORMATION: Clone ID: PAT\_MRT4530\_7716C.1  
 US-10-437-963-77254

Query Match 10.4%; Score 63.2; DB 17; Length 441;  
 Best Local Similarity 53.2%; Pred. No. 3.3e-09;  
 Matches 134; Conservative 0; Mismatches 118; Indels 0; Gaps 0;

QY 74 CATCATGTTTTCGAATTTCTTGAATAATCAACCAATCCGCTCTGAAATGCTGTAATACCA 133  
 |||||  
 DB 426 CATCATGACTTTAACTCTGCAAAATGATCATTCATGCCATCTCTGTCGAAACCTT 367  
 |||||  
 QY 134 AATCATGCTCTGAGTCTTTTCCACTATTTTCCACTCATACCCAGTCTTCCAGCAC 193  
 |||||  
 DB 366 GAGCATCTCTCACACTCTCTCATGCGCAGCTGTGTCGAAACCAACCTTCTCATCAC 307  
 |||||  
 QY 194 GTATTCAGCTCTCTCATCTCCCGCCCAACCCATCCCATCACTCAAAACATTTAAAGC 253  
 |||||  
 DB 306 ATTCTGAGCTCCAGGGGACTTATGAATCCATGCGCTGCGCTCGAACACGCTGAAGC 247  
 |||||  
 QY 254 CTTCGCAAGTCACTGCTCTTCTTTCACGCGCGCTGAATGACCAATTTCTCTCCTC 313  
 |||||  
 DB 246 TTCTCTAGTCTTCCAGCTGCTGTTCTCTCTTAATATGATACAGAGCTTCTATCCTC 187  
 |||||  
 QY 314 CTCTTGTGTCACC 325  
 |||||



Publication No. US20040031072A1  
GENERAL INFORMATION: Thomas J  
APPLICANT: La Rosa Thomas J  
APPLICANT: Kovalic David K  
APPLICANT: Zhou Yihua  
APPLICANT: Cao Yongwei  
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
FILE REFERENCES: 38-21(53223)B  
CURRENT APPLICATION NUMBER: US/10/424,599  
CURRENT FILING DATE: 2003-04-28  
NUMBER OF SEQ ID NOS: 285684  
SEQ ID NO 23473  
LENGTH: 1924  
TYPE: DNA  
ORGANISM: Glycine max  
FEATURE:  
OTHER INFORMATION: Clone ID: PAT\_MRT3847\_121198C.1  
US-10-424-599-23473

Query Match 9.8%; Score 59.8; DB 13; Length 1924;  
Best Local Similarity 52.6%; Pred. No. 1e-07;  
Matches 130; Conservative 0; Mismatches 117; Indels 0; Gaps 0;  
QY 74 CATCATGTTTGTGAATCTTGAATAATCAACCATGCGTCTGAATTTGGTGTGTAATACCA 133  
DB 1176 CATCATTTGCTTGAATCTTGAATAATGACCATGCGTCTCCATCAACATCAACCTTGGGA 1117  
QY 134 AATCATGCTCTGCGAGTCTTTTCCACTATTTTCACTCATACATACCCAGTCTTCCCGACAC 193  
DB 1116 TATCATGTTCTTGCAGTCTTGGACGGTCTTCCCTGCTTCAAGCGGAGGAGACAGGAC 1057  
QY 194 GTATTCAAGCTCTCATACATCCCCCAACCCCATCCCATTTCAAGTCAAAACATTTAAAGC 253  
DB 1056 GGTCTCACTGCTGCGACGGTGAAGACCGTCTGCGGCTTCTGGTCAAGACGTTGAAGGC 997  
QY 254 CTTCGCAAGTCACTGCTTCTTCTTCAACCGCGCGCTGAATGACCAATTCCTCTCTC 313  
DB 996 CTGCTCATGCTCTCTCTCTGCTGCGCTGCTCATGATGCTGCTGAGAGCTCCCGAA 937  
QY 314 CTCTTCG 320  
DB 936 CTGCTCG 930

RESULT 15  
US-10-424-599-79630/c  
Sequence 79630, Application US/10424599  
Publication No. US20040031072A1  
GENERAL INFORMATION:  
APPLICANT: La Rosa Thomas J  
APPLICANT: Kovalic David K  
APPLICANT: Zhou Yihua  
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
FILE REFERENCES: 38-21(53223)B  
CURRENT APPLICATION NUMBER: US/10/424,599  
CURRENT FILING DATE: 2003-04-28  
NUMBER OF SEQ ID NOS: 285684  
SEQ ID NO 79630  
LENGTH: 786  
TYPE: DNA  
ORGANISM: Glycine max  
FEATURE:  
OTHER INFORMATION: Clone ID: PAT\_MRT3847\_42921C.1  
US-10-424-599-79630

Query Match 9.6%; Score 58.4; DB 13; Length 786;  
Best Local Similarity 55.4%; Pred. No. 1.6e-07;  
Matches 113; Conservative 0; Mismatches 91; Indels 0; Gaps 0;  
QY 74 CATCATGTTTGTGAATCTTGAATAATCAACCATGCGTCTGGAATTTGGTGTGTAATACCA 133

DB 717 CATCATTTGCTGAACTCCTTGTATTAATTAACCATGCGCATCTCCATCAACGTCGACTTTCAT 658  
QY 134 AATCATGCTCTGCGAGTCTTTTCCACTATTTTCACTCATACATACCCAGTCTTCCCGACAC 193  
DB 657 GATCATCTTCTTGCACCTGTCAGGGTCTCTCCCTTGTGAGGCGGAGGAGGCGGACAC 598  
QY 194 GTATTCAAGCTCTCATACATCCCCCAACCCCATCCCATTTCAAGTCAAAACATTTAAAGC 253  
DB 597 TGTCCCTAGTTCTCTGACGGTGAATGAACCGTCTGCGGTTCTGGTCAAGACGTTAAAGGC 538  
QY 254 CTTCGCAAGTCACTGCTTCTCTTC 277  
DB 537 CTCCCTCATGTCCTCTCTCTCATC 514

Search completed: August 4, 2004, 17:00:19  
Job time : 248 secs



GenCore version 5.1.6  
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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: July 29, 2004, 09:22:35 ; Search time 17.5 Seconds

(without alignments)

3533.168 Million cell updates/sec

Title: US-10-021-323-13

Perfect score: 1100

Sequence: 1 ggtaatgaatcaactttt.....tgaagctntacaaattaagg 609

Scoring table: BLOSUM62

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Ygapop 10.0, Ygapext 0.5

Fgapop 6.0, Fgapext 7.0

Delop 6.0, Delext 7.0

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 778828

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi  
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-DEV\_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents AA:

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6: /cgn2\_6/ptodata/2/iaa/backfiles.pcp:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	159	15.0	149	3	US-08-963-409-3
C 2	155	14.6	150	3	US-09-239-909-2
C 3	152.5	14.4	160	2	US-08-602-941-1
C 4	152.5	14.4	160	3	US-08-961-264-1
C 5	152.5	14.4	160	4	US-09-442-099A-1
C 6	152.5	14.4	160	4	US-09-612-342-1
C 7	152.5	14.4	160	4	US-09-612-421A-1
C 8	152.5	14.4	160	4	US-09-724-401-1
C 9	147	13.9	150	3	US-09-239-909-4
C 10	147	13.9	642	2	US-08-818-253-2
C 11	147	13.9	642	3	US-08-818-252-2
C 12	147	13.9	652	2	US-08-818-253-4
C 13	147	13.9	149	3	US-08-963-409-3
C 14	145.5	13.7	145	1	US-08-464-164-2
C 15	145.5	13.7	456	1	US-08-338-057-2
C 16	145.5	13.7	456	1	US-08-668-416-2
C 17	145	13.7	149	1	US-08-100-874-2
C 18	144.5	13.6	152	3	US-08-963-409-5
C 19	144	13.6	642	2	US-08-818-252-6
C 20	144	13.6	642	3	US-08-818-252-6
C 21	144	13.6	656	3	US-08-818-253-8
C 22	144	13.6	656	3	US-08-818-253-8
C 23	143	13.5	408	1	US-07-951-715A-21
C 24	143	13.5	408	1	US-08-459-48A-21
C 25	143	13.5	408	3	US-08-459-598A-21
C 26	143	13.5	408	3	US-08-459-598A-21
C 27	143	13.5	408	3	US-08-459-598A-21
C 28	143	13.5	408	4	US-09-547-422-21
C 29	143	13.5	464	1	US-07-951-715A-22
C 30	143	13.5	464	2	US-08-459-48A-22
C 31	143	13.5	464	3	US-08-459-598A-22
C 32	143	13.5	464	3	US-08-459-598A-22
C 33	143	13.5	464	3	US-08-459-598A-22
C 34	143	13.5	464	3	US-08-459-598A-22
C 35	141	13.3	149	3	US-08-963-409-4
C 36	141	13.3	149	3	US-08-641-873-20
C 37	133	12.5	145	3	US-08-720-625-5
C 38	132	12.4	142	1	US-07-951-715A-24
C 39	132	12.4	142	2	US-08-459-48A-24
C 40	132	12.4	142	3	US-08-459-598A-24
C 41	132	12.4	142	3	US-08-459-598A-24
C 42	132	12.4	142	3	US-08-459-598A-24
C 43	132	12.4	142	3	US-08-459-598A-24
C 44	127.5	12.0	146	3	US-08-963-409-1
C 45	121.5	11.5	179	3	US-08-764-563-4

#### ALIGNMENTS

##### RESULT 1

US-08-963-409-3

; Sequence 3, Application US/08963409

; Patent No. 6046315

; GENERAL INFORMATION:

; APPLICANT: Hillman, Jennifer L.

; APPLICANT: Shah, Purvi

; APPLICANT: Corley, Neil C.

; TITLE OF INVENTION: DISEASE ASSOCIATED CALMODULIN PROTEIN

; NUMBER OF SEQUENCES: 5

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Incyte Pharmaceuticals, Inc.

; STREET: 3174 Porter Dr.

; CITY: Palo Alto

; STATE: CA

; COUNTRY: USA

; ZIP: 94304

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FASTSEQ for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/963,409

; FILING DATE: Filed Herewith

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: Billings, Lucy J.

; REGISTRATION NUMBER: 36,749

; REFERENCE/DOCKET NUMBER: PF-0418 US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 650-855-0555

; TELEFAX: 650-845-4166

; INFORMATION FOR SEQ ID NO: 3:



## SEQUENCE CHARACTERISTICS:

LENGTH: 149 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 IMMEDIATE SOURCE:  
 LIBRARY: GenBank  
 CLONE: 385234

US-08-963-409-3

## Alignment Scores:

Pred. No.: 1.17e-09 Length: 149  
 Score: 159.00 Matches: 44  
 Percent Similarity: 50.00% Conservative: 39  
 Best Local Similarity: 26.51% Mismatches: 55  
 Query Match: 14.99% Indels: 28  
 DB: 3 Gaps: 6

US-10-021-323-13 (1-609) x US-08-963-409-3 (1-149)

QY 550 AAAATGTCCTCCCTTAGTAAGACCCGACTTGCACCGGTATTTCGAGAGCTCGACAGAT 491  
 DB 4 LysLeuThrGluGluGlnLeuSerGluPheLeuPheSerLeuPheAsp 23  
 QY 490 GGAGATGCTTGGTTCAGTTCGAGAGCTGGAATGGTTCCTCCAGAGATCGG----- 437  
 DB 24 GlyAspGlyThrLeuThrLysGluLeuGlyThrValMetArgSerLeuGlyGlnAsn 43  
 QY 436 -----TCGTCCCAATTCAGCCTTGAGAAATTCGAGCCCTTAGTGGGAAACCA 389  
 DB 44 ProThrGluAlaGluLeuGlnAspMetLeuAsnGluLeuAsp---ThrAspGlyAsnGly 62  
 QY 388 TGTTCGAATTCGGATGAAATCTTGTCTTTTATGAATCCATTCGAAACCCACTGGCAGAT 329  
 DB 63 ThrLeuAspPheProGluPheLeuThrLeu-----MetAlaArgLysLeuLys--- 78  
 QY 328 GGTGTGACGAAG 269  
 DB 79 -----AspThrAspThrGluGluLeuLeu----- 87  
 QY 268 AGTGACCTTGGAGAGCTTTAAAGCTTTGATTCGATTCGAGTGGGATGGGTGGGGGATGT 209  
 DB 88 -----GluAlaPheArgValPheAspArgAspGlyAspGlyTyrIleSerAla 103  
 QY 208 GAGGAGCTTGAATACGCTCTCGGAGAGACTGGGTATGTCAGGTGAAATAAGTGGAAAGAC 149  
 DB 104 AspGluLeuArgHisValMetThrAsnLeuGly-----GluLysLeuThrAsnGluGlu 121  
 QY 148 TGCAGGAGCATGTTTGTATTACACACCAATTCAGACGGCATGCTGTTGATTTTCAAGAA 89  
 DB 122 ValAspGluMetIleArgGluAlaAspIleAspGlyAspGlyGlnIleAsnTyrGluGlu 141  
 QY 88 TCAAAACATGATGTTA 71  
 DB 142 PheValLysMetMetIle 147

## RESULT 2

US-09-239-909-2

Sequence 1, Application US/09239909  
 Patent No. 6284952

## GENERAL INFORMATION:

APPLICANT: Kumbo Petrochemical Co. Ltd.  
 TITLE OF INVENTION: Transgenic Plants with Divergent SCAM4 or SCAM5 Gene to Achieve  
 FILE REFERENCE: P99-2-6  
 CURRENT APPLICATION NUMBER: US/09/239,909  
 CURRENT FILING DATE: 1999-01-29  
 EARLIER APPLICATION NUMBER: RP 99300136.1  
 EARLIER FILING DATE: 1999-01-08  
 NUMBER OF SEQ ID NOS: 4  
 SOFTWARE: KOPATIN 1.0  
 SEQ ID NO 2  
 LENGTH: 150  
 TYPE: PRT

ORGANISM: G. max calmodulin4 (SCAM4)

US-09-239-909-2

## Alignment Scores:

Pred. No.: 3.34e-09 Length: 150  
 Score: 155.00 Matches: 47  
 Percent Similarity: 47.20% Conservative: 29  
 Best Local Similarity: 29.19% Mismatches: 57  
 Query Match: 14.61% Indels: 28  
 DB: 3 Gaps: 5

US-10-021-323-13 (1-609) x US-09-239-909-2 (1-150)

QY 526 GACTTGCACCGGTATTTCGAGAGCTCGACAGATGGAGATGGCTTCGTAGTCTGGAG 467  
 DB 12 AspPheLysGluAlaPheGlyLeuPheAspGlyAspGlyCysIleThrValGlu 31  
 QY 466 GAGCTGAATTCGTTCTCCAGAGATTCGGTCTGTCCCAATTCAGCTTCAGCAAGATGGAG 407  
 DB 32 GluLeuAlaThrValIleArgSerLeuAspGln---AsnProThrGluGluGluLeuGln 50  
 QY 406 CCTTATGTC-----GGAAACCATGTTTGAATTCGATTCGATTCGATTCGATTCG 365  
 DB 51 AspMetIleSerGluValAspAlaAspGlyAsnGlyThrIleGluPheAspGluPheLeu 70  
 QY 364 TTCCTTATGATTCCTCTCGAACCCACTGGCACATGGTGGTGCACGAGAGAGAGAGAG 305  
 DB 71 -----SerLeuMetAlaLysLysValLysAspThrAspAlaGluGluGlu--- 85  
 QY 304 GAAATTCGCTTCACGGCGCGGTGGAAGAAGACAGTGCACCTTCGCAAGGCTTTTAA 245  
 DB 86 -----LeuLysGluAlaPheLys 91  
 QY 244 GTGTTTGAATTCGAGTGGGATTCGGTTCGGGGATGTGAGAGCTTCGATTCGATTCGAG 185  
 DB 92 ValPheAspLysAspGlnAsnGlyTyrIleSerAlaSerGluLeuArgHisValMetIle 111  
 QY 184 AGACTGGGTATGTCAGGTGCAAAATAGTCGAAAGACTGCAGGAGCATGATTTGGTATTAC 125  
 DB 112 AsnLeuGly-----GluLysLeuThrAspGluGluValGluGlnMetIleLysGluAla 129  
 QY 124 GACACCAATTCAGACGGCATGCTGTTGATTTTCAAGAAATTCAAAAACATGATTCATTC 65  
 DB 130 AspLeuAspGlyAspGlyGlnValAsnTyrGluGluPheValLysMetMetThrVal 149  
 QY 64 CQT 62  
 DB 150 Arg 150

## RESULT 3

US-08-602-941-1

Sequence 1, Application US/08602941  
 Patent No. 5837680

## GENERAL INFORMATION:

APPLICANT: Moses, Marsha A.  
 APPLICANT: Langer, Robert S.  
 APPLICANT: Wiederschain, Dimitri G.  
 APPLICANT: Wu, Immin  
 APPLICANT: Sytkowski, Arthur  
 TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS  
 TITLE OF INVENTION: COMPRISING TROPONIN SUBUNITS, FRAGMENTS AND ANALOGS  
 NUMBER OF SEQUENCES: 3  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Pennie & Edmonds  
 STREET: 1155 Avenue of the Americas  
 CITY: New York  
 STATE: NY  
 COUNTRY: U.S.A.  
 ZIP: 10036-2711  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible

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; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/602,941
; FILING DATE: 16-FEB-1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Poissant, Brian M.
; REGISTRATION NUMBER: 28,452
; REFERENCE/DOCKET NUMBER: 8657-021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864/9741
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. 5837680e
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..160
; OTHER INFORMATION: /label= Human Past Twitch Skeletal
; OTHER INFORMATION: Muscle Troponin C
; US-08-602-941-1

Alignment Scores:
Pred. No.: 6.61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 2 Gaps: 4

US-10-021-323-13 (1-609) x US-08-602-941-1 (1-160)
QY 526 GACTTGCACGCGTATTTCGAGAGCTCGACAGAGTGGAGTGGCTTGGTTAGTCTGGAG 467
Db 19 GluPhelysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValIys 38
QY 466 GAGCTGAATTGGTTCCTCCAGAGATCGGGTCTGTCCCAATTCAGCCTTGAAGATTGGAG 407
Db 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY 406 CCCTTAGTG-----GGAACCATGTTTGAACCTTGAACCTTGAACCTTGAACCTTGTG 365
Db 58 AlaIleIleGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY 364 TTCTTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGGAGGAGGAG 305
Db 78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY 304 GAATTGTCATTACGCGCGGGGTGAAGAGACAGACAGTACCTTGGAGAGCTTTTAA 245
Db 96 -----LeuAlaGluCysPheArg 101
QY 244 GTGTTTGACTTGAATGGGATGGTTCGGGGGATGTCGAGGAGCTTGAATACGTCCTGGA 185
Db 102 IlePheAspArgAsnAlaAspGlyTyrIleAspProGluGluLeuAlaGluIlePheArg 121
QY 184 AGACTGGTATGTGAGGTGAAATAGTGTGAAAGACCTGCAGGAGCATGATTGTGATTAC 125
Db 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139
QY 124 GACACCAATTACAGCGCATGGTGTGATTTTCAAGAAATCAAAACATGATG 74
Db 140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156

RESULT 4
US-08-961-264-1
; Sequence 1, Application US/08961264
; Patent No. 6025331

GENERAL INFORMATION:
; APPLICANT: Moses, Marsha A.
; APPLICANT: Langer, Robert S.
; APPLICANT: Wiederschain, Dimitri G.
; APPLICANT: Wu, Immin
; APPLICANT: Sytkowski, Arthur
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS
; TITLE OF INVENTION: COMPRISING TROPONIN SUBUNITS, FRAGMENTS AND ANALOGS
; TITLE OF INVENTION: THEREOF AND METHODS OF THEIR USE TO INHIBIT ANGIOGENESIS
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESS: Pennie & Edmonds
; CITY: New York
; STATE: NY
; COUNTRY: U.S.A.
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/961,264
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/602,941
; FILING DATE: 16-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Poissant, Brian M.
; REGISTRATION NUMBER: 28,452
; REFERENCE/DOCKET NUMBER: 8657-021-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-790-9090
; TELEFAX: 212-869-8864/9741
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: No. 6025331e
; FEATURE:
; NAME/KEY: Peptide
; LOCATION: 1..160
; OTHER INFORMATION: /label= Human Past Twitch Skeletal
; OTHER INFORMATION: Muscle Troponin C
; US-08-961-264-1

Alignment Scores:
Pred. No.: 6.61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 2 Gaps: 4

US-10-021-323-13 (1-609) x US-08-961-264-1 (1-160)
QY 526 GACTTGCACGCGTATTTCGAGAGCTCGACAGAGTGGAGTGGCTTGGTTAGTCTGGAG 467
Db 19 GluPhelysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValIys 38
QY 466 GAGCTGAATTGGTTCCTCCAGAGATCGGGTCTGTCCCAATTCAGCCTTGAAGATTGGAG 407
Db 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY 406 CCCTTAGTG-----GGAACCATGTTTGAACCTTGAACCTTGAACCTTGTG 365
Db 58 AlaIleIleGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY 364 TTCTTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGGAGGAGGAG 305
Db 78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY 304 GAATTGTCATTACGCGCGGGGTGAAGAGACAGACAGTACCTTGGAGAGCTTTTAA 245
Db 96 -----LeuAlaGluCysPheArg 101
QY 244 GTGTTTGACTTGAATGGGATGGTTCGGGGGATGTCGAGGAGCTTGAATACGTCCTGGA 185
Db 102 IlePheAspArgAsnAlaAspGlyTyrIleAspProGluGluLeuAlaGluIlePheArg 121
QY 184 AGACTGGTATGTGAGGTGAAATAGTGTGAAAGACCTGCAGGAGCATGATTGTGATTAC 125
Db 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139
QY 124 GACACCAATTACAGCGCATGGTGTGATTTTCAAGAAATCAAAACATGATG 74
Db 140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156
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Db      78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY      304 GAATTGGTCATTACCGCGCGCGGTGGAAGAGACAGTGCCTTCGGAAGCGCTTTTAA 245
Db      96 -----LeuAlaGluCysPheArg 101
QY      244 GGTGTTGACTTGAATGGGATGGTGGGGGATGTGAGGAGCTTGAATACGTGCTGGGA 185
Db      102 IIPheAspArgAsnAlaAspGlyTyrlleAspProGluGluLeuAlaGluIlePheArg 121
QY      184 AGACTGGGTATGTGAGGTGAAAATAGTGCAGGAGCATGATTTGGTATTAC 125
Db      122 AlaSerGly-----GluHisValThrAspGluGluIleSerLeuMetLysAspGly 139
QY      124 GACACCAATTACAGCGCATGTGATTTTCAGAAATTCAAAACATGATG 74
Db      140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156

RESULT 5
US-09-442-099A-1
; Sequence 1, Application US/09442099A
; Patent No. 6465431
; GENERAL INFORMATION:
; APPLICANT: Thorn, R.
; APPLICANT: Lanser, M.
; APPLICANT: Moses, M.
; APPLICANT: Wiederschain, D.
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS COMPRISING TROPONIN SUBUNITS,
; TITLE OF INVENTION: FRAGMENTS AND HOMOLOGS THEREOF AND METHODS OF THEIR USE TO
; TITLE OF INVENTION: INHIBIT ANGIOGENESIS
; FILE REFERENCE: 8657-028
; CURRENT APPLICATION NUMBER: US/09/442,099A
; PRIOR FILING DATE: 1997-11-17
; PRIOR APPLICATION NUMBER: 09/268,274
; PRIOR FILING DATE: 1999-03-15
; PRIOR APPLICATION NUMBER: 08/961,264
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: 08/602,941
; PRIOR FILING DATE: 1996-02-16
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 160
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-442-099A-1

Alignment Scores:
Pred. No.: 6,61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 4 Gaps: 4

US-10-021-323-13 (1-609) x US-09-442-099A-1 (1-160)
QY      526 GACTTGCAACGGTATTTCGAGAGCTCGACAAGATGAGATGGCTTCGTAGTCTGGAG 467
Db      19 GluPheLysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValLys 38
QY      466 GAGCTGAATGTTGCTCCAGAGATCGGGTCTGTCCAAATTCAGCTTGAAGAAATGGAG 407
Db      39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY      406 CCTTAGTG-----GGAACCATGTTTGAATCTGGATGAATCTTGT 365
Db      58 AlaIleIleGluGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY      364 TTCCTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGAGGAGGAG 305
Db      78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95

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QY      304 GAATTGGTCATTACCGCGCGCGGTGGAAGAGACAGTGCCTTCGGAAGCGCTTTTAA 245
Db      96 -----LeuAlaGluCysPheArg 101
QY      244 GGTGTTGACTTGAATGGGATGGTGGGGGATGTGAGGAGCTTGAATACGTGCTGGGA 185
Db      102 IIPheAspArgAsnAlaAspGlyTyrlleAspProGluGluLeuAlaGluIlePheArg 121
QY      184 AGACTGGGTATGTGAGGTGAAAATAGTGCAGGAGCATGATTTGGTATTAC 125
Db      122 AlaSerGly-----GluHisValThrAspGluGluIleSerLeuMetLysAspGly 139
QY      124 GACACCAATTACAGCGCATGTGATTTTCAGAAATTCAAAACATGATG 74
Db      140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156

RESULT 6
US-09-612-342-1
; Sequence 1, Application US/09612342
; Patent No. 6586401
; GENERAL INFORMATION:
; APPLICANT: Thorn, R.
; APPLICANT: Lanser, M.
; APPLICANT: Moses, M.
; APPLICANT: Wiederschain, D.
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS COMPRISING
; TITLE OF INVENTION: TROPONIN SUBUNITS, FRAGMENTS AND HOMOLOGS THEREOF AND
; TITLE OF INVENTION: METHODS OF THEIR USE TO INHIBIT ANGIOGENESIS
; FILE REFERENCE: 8657-026
; CURRENT APPLICATION NUMBER: US/09/612,342
; CURRENT FILING DATE: 2000-07-06
; PRIOR FILING DATE: 1999-03-15
; PRIOR APPLICATION NUMBER: US/09/268,274
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: 08/961,264
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: 08/602,941
; PRIOR FILING DATE: 1996-02-16
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 160
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-612-342-1

Alignment Scores:
Pred. No.: 6,61e-09 Length: 160
Score: 152.50 Matches: 43
Percent Similarity: 45.86% Conservative: 29
Best Local Similarity: 27.39% Mismatches: 60
Query Match: 14.37% Indels: 25
DB: 4 Gaps: 4

US-10-021-323-13 (1-609) x US-09-612-342-1 (1-160)
QY      526 GACTTGCAACGGTATTTCGAGAGCTCGACAAGATGAGATGGCTTCGTAGTCTGGAG 467
Db      19 GluPheLysAlaAlaPheAspMetPheAspAlaAspGlyGlyAspIleSerValLys 38
QY      466 GAGCTGAATGTTGCTCCAGAGATCGGGTCTGTCCAAATTCAGCTTGAAGAAATGGAG 407
Db      39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrLysGluGluLeuAsp 57
QY      406 CCTTAGTG-----GGAACCATGTTTGAATCTGGATGAATCTTGT 365
Db      58 AlaIleIleGluGluValAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77
QY      364 TTCCTTTATGAATCCATCTCGAACCCACTGGCACATGGTGTGACGAGAGAGGAGGAG 305
Db      78 ValMetMetValArgGlnMetLysGluAspAlaLysGlyLysSerGluGluGlu----- 95
QY      304 GAATTGGTCATTACCGCGCGCGGTGGAAGAGACAGTGCCTTCGGAAGCGCTTTTAA 245

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	96	:::    :::	LeuAlaGluCysPheArg 101
Dbb		-----	
QY	244	GTCGTTCACCTGAATGGCGGATGGCTTGGGGGATGTCAGGAGCTTGTAATCATGCTGCTGGAA 185	
		:::      ::	
Dbb	102	IlePheAsnAraGlnalaaspGlyTyrlleaspProGluGluLeualaGlullePheArg 121	
		::	
QY	184	AGACTGGGTATGTGAGCTGAAAATAGTGGAAAGAAGACTGCAGGAGCAATGATTGGTTATTAC 125	
		::: ::::	
Dbb	122	AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139	
		::: ::::	
QY	124	GACACCATTTCAGACGGCGATGGTTGGATTTCACAAGATTCAAAAACATGATG 74	
		::: ::::	
Dbb	140	AspLysAsnAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156	
		::: ::::	

244 GTGTTTGACTTGAATGGGGATGGGTGGGGGGGATGTGAGGACGCTTCAATACGTCTGGGA 185  
Db :|||:||| :|||:||| :|||:||| :|||:||| :|||:|||  
102 IlePheAspArgasAlaahespGlyTyrlleAspProGlUGluLeuAlaGIuIllePheArg 121  
Qy 184 AGACTGGGTATNGAGGTGAAATAGTGGAAAAGACTGCAGGAGCATGATTGGTTATTAC 125  
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122 AlaSerGly-----GluHisValThrAspGlUGluHuilecLusierIeuMetLysAspGly 139  
Qy 124 GACACCAATTTCAGACGCCATGTTGATTTTCAAGAATTCAAAAACATGATG 74  
Db ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
140 AspLysasnAasnAspGlyArgilleAspPheAspGluPheLeuLysMethet 156

RESULT 8  
US-09-724-401-1  
Sequence 1, Application US/09724401  
Patent No. 6653283  
GENERAL INFORMATION:  
APPLICANT: Moses, Marsha A.  
Langer, Robert S.  
Wiederschain, Dimitri G.  
Wu, Immin  
Sytkowski, Arthur  
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS  
COMPRISE TROPONIN SUBUNITS, FRAGMENTS AND ANALOGS  
THEREOF AND METHODS OF THEIR USE TO INHIBIT ANGIOGENESIS  
NUMBER OF SEQUENCES: 3  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: NY  
COUNTRY: U.S.A.  
ZIP: 10036-2711  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/724\_401  
FILING DATE: 28-No.. 6653283-2000  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/602,941  
FILING DATE: 1996-02-16  
ATTORNEY/AGENT INFORMATION:  
NAME: Poissant, Brian M.  
REGISTRATION NUMBER: 28,452  
REFERENCE/DOCKET NUMBER: 8657-021-999  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-790-9090  
TELEFAX: 212-869-3864/9741  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 160 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: No. 6653283e  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..160  
OTHER INFORMATION: /label= Human Fast Twitch Skeletal Muscle Troponin C  
SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
US-09-724-401-1

Query Match: 14.37% Indels: 25  
DB: 4 Gaps: 4

US-10-021-323-13 (1-609) x US-09-724-401-1 (1-160)

QY 526 GACTTGCACCGCGTATTTCGAGACGCTCGACAGAAATGGAGATGGCTTGGTTAGTCTGGAG 467  
DB 19 GluPheIysalaalaPheAspMetPheAspAlaAspGlyGlyGlyAspIleSerValIys 38  
QY 466 GAGCTGAATTGGTTGCTCCAGAGAAATCGGGTCTGTCCAAATTCAGCCCTTGGAAGAAATGGAG 407  
DB 39 GluLeuGlyThrValMetArgMetLeuGlyGlnThrPro---ThrIysGluGluLeuAsp 57  
QY 406 CCCTTAGTG-----GGAAACCATGTTTGACTTGGATGGAATCTCTG 365  
DB 58 AlaIleIleGluLuvAlaAspGluAspGlySerGlyThrIleAspPheGluGluPheLeu 77  
QY 364 TTCTTTTATGAATCCATCTCGAACCCACTGGCCACATGGTGGTGCAGCAAGAGGAGGAGGAG 305  
DB 78 ValMetMetValArgGlnMetLysGluAlaAspAlaLysGlyLysSerGluGluGlu----- 95  
QY 304 GAATTGGTTCATTCCAGCGCGCGGTGAAGAGAGACAGACAGTGCACCTTCGAGGCTTTTAA 245  
DB 96 -----LeuAlaGluCysPheArg 101  
QY 244 GTGTTTGCATCTGAATGGGGATGGTGGGGGGATGTGAGGAGCTTCAATACGTCTGGGA 185  
DB 102 IlePheAspArgAsnAlaAspGlyTyIleAspProGluGluLeuAlaGluIlePheArg 121  
QY 184 AGACTGGGTATGTGAGGTGAAATATGTGAAAGACTGCAGGAGCATGATTTGGTATTAC 125  
DB 122 AlaSerGly-----GluHisValThrAspGluGluIleGluSerLeuMetLysAspGly 139  
QY 124 GACACCAATTCAGACGGCATGGTTGATTTTCAAGATTCAAAAACATGATG 74  
DB 140 AspLysAsnAsnAspGlyArgIleAspPheAspGluPheLeuLysMetMet 156

RESULT 9

US-09-239-909-4  
; Sequence 4, Application US/09239909  
; Patent No. 6284952  
; GENERAL INFORMATION:  
; APPLICANT: Kumho Petrochemical Co. Ltd.  
; TITLE OF INVENTION: Transgenic Plants with Divergent SCaM4 or SCaM5 Gene to Achieve M  
; FILE REFERENCE: P99-2-6  
; CURRENT APPLICATION NUMBER: US/09/239,909  
; CURRENT FILING DATE: 1999-01-29  
; EARLIER APPLICATION NUMBER: EP 99300136.1  
; EARLIER FILING DATE: 1999-01-08  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: KOPATIN 1.0  
; SEQ ID NO 4  
; LENGTH: 150  
; TYPE: PRT  
; ORGANISM: G. max calmodulin5 (SCaM5)  
US-09-239-909-4

Alignment Scores:  
Pred. No.: 2,72e-08 Length: 150  
Score: 147.00 Matches: 46  
Percent Similarity: 49.38% Conservative: 33  
Best Local Similarity: 49.38% Mismatches: 51  
Query Match: 13.85% Indels: 30  
DB: 3 Gaps: 6

US-10-021-323-13 (1-609) x US-09-239-909-4 (1-150)

QY 529 ACCGACTTGCACCGCGTATTTCGAGACGCTCGACAGAAATGGAGATGGCTTGGTTAGTCTG 470  
DB 11 SerGluIleIysGluAlaPheGlyLeuPheAspLysAspGlyAspGlyCysIleThrVal 30  
QY 469 GAGGACTGAATTGGTTGCTCCAGAGAAATCGGGTCTGTCCAAATTC---AGCCTTGGAAGA 413  
DB: 1 Indels: 25 Gaps: 4







Percent Similarity: 41.18% Conservative: 26  
 Best Local Similarity: 27.27% Mismatches: 59  
 Query Match: 13.71% Indels: 51  
 DB: 1 Gaps: 6

US-10-021-323-13 (1-609) x US-08-464-164-2 (1-456)

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QY 565 ATCTCTTTGGTGTAAATGTCCTCCCTTAGTAAGACCGAC---TTGCAAGCGGTATTC 509
Db 290 LeuTyrMetGlySerLysLeuThrAsnGluThrAspGluLeuAsnLysIlePhe 309
QY 508 GAGAGCTCGACAAGATGGAGATGGCTTCTAGTCTGGAGGAGCTCAATGGTTGGTCTC 449
Db 310 GlnLysMetAspLysAsnGlyGlnLeuAspLysGlnGluLeu----- 325
QY 448 CAGAGATCGGGTCTGTCCAAATTCAGCAATTTGGAGCCCTTAGTGGGAAACCA 389
Db 326 -----MetGluGlyTyrValGluLeuMetLysLeuLysGlyGluAsp 339
QY 388 TGTTTGAACCTTGGATGAATCTTCTTTATGAATCCATCTCGAACCCACTGGCACAT 329
Db 340 ValSerValLeuAspLysSerAlaIle----- 348
QY 328 GGTGGTGCAGAGAGGAGGAGGAGATTTGCTCAATTCACGGC-----GGC 284
Db 349 -----GluThrGluValGlnValLeuGluAlaValAspPheAspLysAsn 364
QY 283 GGTCAAGAGACAGACAGTGAC----- 263
Db 365 GlyPheIleGluTyrSerGluPheValThrValAlaMetAspArgThrLeuLeuSer 384
QY 262 -----CTTGGCAAGGCTTTAAAGTGTTCGACTTGAATGGGATGGGTGGGGGA 212
Db 385 ArgGlnArgLeuGluArgAlaPheGluMetPheAspSerAspGlySerGlyValIleSer 404
QY 211 TGTGAGAGCTTGAATACGTCTCGGAGAGCTGGGTATGTGAGGTGAAAAATAGTGGAAAA 152
Db 405 SerSerGluLeuAlaThrIlePheGlyVal-----SerGluLeuAspSerGlu 420
QY 151 GACTGCAGAGCATGATTTGGTATTACGACACCAATTCAGACCGCATGTTGATTTCAA 92
Db 421 AlaTrpArgValLeuAlaGluValAspArgAsnAsnAspGlyGluValAspPheGlu 440
QY 91 GAATTCAAAAACATGATGTTA 71
Db 441 GluPheGlnGlnMetLeuLeu 447

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# RESULT 15

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US-08-338-057-2
; Sequence 2, Application US/08338057
; Patent No. 5795741
; GENERAL INFORMATION:
; APPLICANT: Tomley, Fiona M.
; APPLICANT: Dunn, Paul P. J.
; APPLICANT: Bumstead, Janene M.
; APPLICANT: Vermeulen, Arno N.
; TITLE OF INVENTION: Coccidiosis poultry vaccine
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Organon Teknika Corporation
; STREET: 1330 Piccard Drive
; CITY: Rockville
; STATE: Maryland
; COUNTRY: U.S.A.
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/338,057
; FILING DATE:

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CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: EP 93.309078.9  
 FILING DATE: 12-NOV-1993  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Gormley, Mary E.  
 REGISTRATION NUMBER: 34,409  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (301) 258-5200  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 456 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-338-057-2

Alignment Scores:  
 Pred. No.: 6,37e-08 Length: 456  
 Score: 145.50 Matches: 51  
 Percent Similarity: 41.18% Conservative: 26  
 Best Local Similarity: 27.27% Mismatches: 59  
 Query Match: 13.71% Indels: 51  
 DB: 1 Gaps: 6

US-10-021-323-13 (1-609) x US-08-338-057-2 (1-456)

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QY 565 ATCTCTTTGGTGTAAATGTCCTCCCTTAGTAAGACCGAC---TTGCAAGCGGTATTC 509
Db 290 LeuTyrMetGlySerLysLeuThrAsnGluThrAspGluLeuAsnLysIlePhe 309
QY 508 GAGAGCTCGACAAGATGGAGATGGCTTCTAGTCTGGAGGAGCTCAATGGTTGGTCTC 449
Db 310 GlnLysMetAspLysAsnGlyGlnLeuAspLysGlnGluLeu----- 325
QY 448 CAGAGATCGGGTCTGTCCAAATTCAGCAATTTGGAGCCCTTAGTGGGAAACCA 389
Db 326 -----MetGluGlyTyrValGluLeuMetLysLeuLysGlyGluAsp 339
QY 388 TGTTTGAACCTTGGATGAATCTTCTTTATGAATCCATCTCGAACCCACTGGCACAT 329
Db 340 ValSerValLeuAspLysSerAlaIle----- 348
QY 328 GGTGGTGCAGAGAGGAGGAGGAGATTTGCTCAATTCACGGC-----GGC 284
Db 349 -----GluThrGluValGlnValLeuGluAlaValAspPheAspLysAsn 364
QY 283 GGTCAAGAGACAGACAGTGAC----- 263
Db 365 GlyPheIleGluTyrSerGluPheValThrValAlaMetAspArgThrLeuLeuSer 384
QY 262 -----CTTGGCAAGGCTTTAAAGTGTTCGACTTGAATGGGATGGGTGGGGGA 212
Db 385 ArgGlnArgLeuGluArgAlaPheGluMetPheAspSerAspGlySerGlyValIleSer 404
QY 211 TGTGAGAGCTTGAATACGTCTCGGAGAGCTGGGTATGTGAGGTGAAAAATAGTGGAAAA 152
Db 405 SerSerGluLeuAlaThrIlePheGlyVal-----SerGluLeuAspSerGlu 420
QY 151 GACTGCAGAGCATGATTTGGTATTACGACACCAATTCAGACCGCATGTTGATTTCAA 92
Db 421 AlaTrpArgValLeuAlaGluValAspArgAsnAsnAspGlyGluValAspPheGlu 440
QY 91 GAATTCAAAAACATGATGTTA 71
Db 441 GluPheGlnGlnMetLeuLeu 447

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Search completed: July 29, 2004, 09:28:14  
 Job time : 20.5 secs



GenCore version 5.1.6  
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OM nucleic - protein search, using frame\_plus\_n2p model

Run on: July 29, 2004, 09:23:06 ; Search time 46.5 Seconds  
(without alignments)  
8216.469 Million cell updates/sec

Title: US-10-021-323-13

Perfect score: 1100

Sequence: 1 ggaatgaatacaactttt.....tgaagctnatacaattaagg 609

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Ygapop 10.0 , Ygapext 0.5	
Fgapop 6.0 , Fgapext 7.0	
Delpop 6.0 , Delpext 7.0	

Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 2582470

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

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-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blosum62  
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100  
-THR\_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=ptc -HEAPSIZ=500 -MINLEN=0  
-MAXLEN=2000000000 -USER=US10021323 -CGN 1\_13 -runat\_29072004\_101748\_1609  
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-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5  
-FCAPOP=6 -FCAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Published Applications AA:  
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2: /cgn2\_6/ptodata/2/pubpaa/PCR\_NEW\_PUB.pep.\*  
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12: /cgn2\_6/ptodata/2/pubpaa/US09\_NEW\_PUB.pep.\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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c	1	407.5	38.4	156	12	US-10-424-599-184133
c 2	401	37.8		163	12	US-10-424-599-148963
c 3	265	25.0		269	12	US-10-425-1114-50879
c 4	260	24.5		183	12	US-10-424-599-256423
c 5	259.5	24.5		196	16	US-10-437-963-182194
c 6	254	23.9		212	12	US-10-424-599-166315
c 7	245	23.1		150	12	US-10-424-599-166314
c 8	242.5	22.9		172	16	US-10-437-963-123218
c 9	241.5	22.8		150	12	US-10-424-599-204757
c 10	241.5	22.8		162	16	US-10-437-963-168756
c 11	239.5	22.6		205	10	US-09-847-208-45
c 12	239	22.5		212	12	US-10-424-599-148206
c 13	235	22.1		150	12	US-10-424-599-22472
c 14	233	22.0		152	12	US-10-424-599-266950
c 15	218	20.5		197	16	US-10-437-963-144209
c 16	212	20.0		208	12	US-10-424-599-230926
c 17	211	19.9		196	16	US-10-437-963-102544
c 18	208.5	19.7		187	12	US-10-425-114-67716
c 19	205.5	19.4		139	12	US-10-424-599-228265
c 20	204	19.2		141	12	US-10-424-599-143677
c 21	204	19.2		145	15	US-10-369-493-5397
c 22	204	19.2		153	12	US-10-425-114-46815
c 23	202.5	19.1		180	12	US-10-424-599-192108
c 24	197.5	18.6		170	16	US-10-437-963-176864
c 25	197	18.6		182	12	US-10-424-599-199507
c 26	194	18.3		185	12	US-10-424-599-247385
c 27	192.5	18.1		197	16	US-10-437-963-202111
c 28	191	18.0		172	16	US-10-437-963-104413
c 29	190	17.9		188	12	US-10-424-599-181888
c 30	183.5	17.3		180	12	US-10-424-599-192110
c 31	183	17.2		179	12	US-10-424-599-278591
c 32	182	17.2		166	16	US-10-437-963-185233
c 33	180	17.0		187	12	US-10-424-599-268807
c 34	179.5	16.9		140	12	US-10-424-599-146471
c 35	175.5	16.5		146	16	US-10-437-963-126883
c 36	174	16.4		139	12	US-10-424-599-237397
c 37	173.5	16.4		201	16	US-10-437-963-155018
c 38	172.5	16.3		189	12	US-10-424-599-147725
c 39	170	16.0		200	16	US-10-437-963-173279
c 40	165.5	15.6		151	16	US-10-437-963-144086
c 41	164.5	15.5		109	12	US-10-424-599-228264
c 42	162	15.3		141	12	US-10-424-599-263508
c 43	161	15.2		141	12	US-10-424-599-238414
c 44	161	15.2		204	16	US-10-437-963-180426
c 45	159	15.0		151	16	US-10-437-963-173783

#### ALIGNMENTS

#### RESULT 1

US-10-424-599-184133  
; Sequence 184133, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:

; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 184133  
; LENGTH: 156  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:

; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_137288C.1.pap  
US-10-424-599-184133

Alignment Scores:

Query Match:	37.79%	Indels:	12
DB:	12	Gaps:	4
US-10-021-323-13 (1-609) x US-10-424-599-148963 {1-163}			
QY	547	ANGTCCCCCTTAGTAAGACCGACTTCACACGCGTATTTCGAGAGCTTCGACAAAGATGGA	488
DB	1	MetCysProLeuThrProSerAspLeuLeuArgIlePheGluLysValAspValAsnGly	20
QY	487	GATGGCTTCGTTAGTCTCGAGGAGCTGAATTGGTGTCTCCAGAGAAATCGGGTCTGTCCAA	428
DB	21	AspGlyPheLeuSerLeuGluLeuLysMetLeuLeuGluLysThrGly---PheGly	39
QY	427	TTACGCTTGAAGAAATTCGAGCCCTTAGTGGGAAACCACTGTTTGAACCTTGGATGAATTC	368
DB	40	TyrSerIleGluGluLeuGluSerLeuValGlyLysLysSerLeuAspPheSerGluPhe	59
QY	367	TTGTCTCTTTATGAATTCATCTCGAACCCACTGGCCACATGGTGTGTGACGAAGAGGAGGAG	308
DB	60	LeuPhePheTyrGluSerArgLeuLysGlnAsnAsnAngly-----Glu	74
QY	307	GAGGAATTGGCTCTTCACGGCGCGCGT-----GAAGAAGAAGACAGCTGAC	263
DB	75	LysGluLeuGlyAlaSerGlyGlyAspSerAspGluValGluGluValGluArgasp	94
QY	262	CTTCGGAAGGCTTTTAAAGTGTGTGACTTGAATGGGATGGGTGGGGGATGTGTAGGAG	203
DB	95	LeuValLysAlaPheLysValPheAspLeuAspAspGlyPheIleThrSerGlnGlu	114
QY	202	CTTGAAATACGCTCGGGAAGACTGGGTATG---TGAGGTGAAATAGTGGAAAAGACTGC	146
DB	115	LeuGluCysValLeuLysArgLeuGlyMetTyrAspAspGluArgCysGlyLysAspCys	134
QY	145	ACGAGCATGATTGGTATTACGACCACAATTCAGACGGCATGGTGTGATTTTCAAGAATTC	86
DB	135	AlaSerMetIleCysSerTyrAspThrAsnPheAspGlyLysLeuAspPheGlnGluPhe	154
QY	85	AAAAACATGATGTACATTCGCCGTCT 59	
DB	155	LysGlyMetMetLeuLeuThrThrSer 163	
RESULT 3			
US-10-425-114-50879			
; Sequence 50879, Application US/10425114			
; Publication NO. US20040034888A1			
; GENERAL INFORMATION:			
; APPLICANT: Liu, Jingdong			
; APPLICANT: Zhou, Yihua			
; APPLICANT: Kovalic, David K.			
; APPLICANT: Screen, Steven E			
; APPLICANT: Tabaska, Jack B			
; APPLICANT: Cao, Yongwei			
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated W			
; FILE REFERENCE: 38-21(5313)B			
; CURRENT APPLICATION NUMBER: US/10/425,114			
; NUMBER OF SEQ ID NOS: 2003-04-28			
; SEQ ID NO 50879			
; LENGTH: 269			
; TYPE: PRT			
; ORGANISM: Zea mays			
; FEATURE:			
; OTHER INFORMATION: Clone ID: LIB3069-036-D11_FLI.pep			
US-10-425-114-50879			
Alignment Scores:			
Pred. No.:	2,82e-19	Length:	269
Score:	265.00	Matches:	72
Percent Similarity:	52.51%	Conservative:	22
Best Local Similarity:	40.22%	Mismatches:	65
Query Match:	24.98%	Indels:	20
DB:	12	Gaps:	6

US-10-021-323-13 (1-609) x US-10-425-114-50879 (1-269)

QY 553 GGTAAATGTC-----CCCTTAGTAAGACCGACTTGCAACGGTATTTCGAGAGCTC 500  
 Db 87 GlyLysMetGlnAlaArgProAspProGluLysAspLeuGlyIleValPheSerThrPhe 106  
 QY 499 GACAAGATGAGATGCTTGGTGTAGTCTGGAGAGCTGAATGGTCTCCAGAGATC 440  
 Db 107 AspHisAspGlyAspGlyPheIleThrAlaValGluLysLeuGluSerLeuArgLeu 126  
 QY 439 GGGTCTGCTCAATTCAGCTTGAAGAAATGAGCCCTTAGTGGGAAACCATGTTTGAAC 380  
 Db 127 Gly---IleAlaValSerAlaAspGluAlaAlaMetValThrArgValAspAlaAsn 145  
 QY 379 TTGGAT-----GAATCTCTGTTCTTTATGATTCATCCATCTCGAACCCA 338  
 Db 146 SerAspGlyLeuIleAspIleHisGluPheArgGluLeuTyrAspSerIleProLysLys 165  
 QY 337 CTGGCACAT-----GGTGTGACGACGAGGAGGAGGAGGAGGATTCATTT 293  
 Db 166 ArgLysHisGlnHisProAlaAlaGlyGlyPheSerGlyAlaAlaArgGluValProVal 185  
 QY 292 CACGGCGCGGTGAA-----GAAGAAGACAGTGCACCTTGCAGAGCTTTTAAAGTGT 239  
 Db 186 GluGlyAspAspGluGluAlaGluGluArgAspLeuArgGluAlaPheAspValPhe 205  
 QY 238 GACTTGATGGGATGGTGGGGGATGTCAGGAGCTTGAATAGTCTCGGAGACTG 179  
 Db 206 AspGlyAsnLysAspGlyLeuIleSerAlaGluLysLeuGlyThrValLeuGlySerLeu 225  
 QY 178 GGTATGTGAGTGAATAATAGTGAATA-----GACTGACGAGGAGCATGTTGG 131  
 Db 226 GlyLeuArgArgGlnGlyAsnGlyArgThrAlaValAlaAspCysArgAspMetIleArg 245  
 QY 130 TATTACACCAATTCAGACGGCATGGTGAATTTCAAGAAATTCAAAACATGATG 74  
 Db 246 LeuValAspSerAspGlyAspGlyMetValSerPheGluGluPheLysArgMetMet 264

RESULT 4  
 US-10-424-599-256423  
 ; Sequence 256423, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa, Thomas J  
 ; APPLICANT: Kovalic, David K  
 ; APPLICANT: Zhou, Yihua  
 ; APPLICANT: Cao, Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 256423  
 ; LENGTH: 183  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_73574C.1.pep  
 US-10-424-599-256423

Alignment Scores:  
 Pred. No.: 8,52e-19 Length: 183  
 Score: 260.00 Matches: 62  
 Percent Similarity: 57.14% Conservative: 30  
 Best Local Similarity: 38.51% Mismatches: 53  
 Query Match: 24.51% Indels: 16  
 DB: 12 Gaps: 4

US-10-021-323-13 (1-609) x US-10-424-599-256423 (1-183)

QY 538 CTTAGTAAGACCGACTTGCACCGCTATTTCGAGAAGCTCGACAAGATGGAGATGGCTTC 479

Db 24 LeuAsnSerLeuArgLeuArgIlePheAspMetPheAspLysAsnLysAspGlyThr 43  
 QY 478 GTTAGTCTGGAGAGCTGAATTTGGTTGCTCCAGAGAATCGGCTCTGTCCAATTCAGCCTT 419  
 Db 44 IleThrValThrGluIleSerGlnAlaLeuSerLeuLeuGly---LeuAspAlaAspVal 62  
 QY 418 GAAGATTTGGAGCCCTTAGTG-----GGAAACCATGTTTGAACCTG 377  
 Db 63 AlaGluLeuGluSerMetThrLysLeuTyrIleArgProGlyAsnGluGlyLeuThrTyr 82  
 QY 376 CATCAATTTCTTCTTTATGATTCATCTCGAACCCACTGGCACATGCTGTCACGAA 317  
 Db 83 GluAspPheMetAlaLeuHisGluSerLeuGlyGlu-----ThrTyrPheGlyLeuVal 100  
 QY 316 GAGGAGGAGGAGGAATTTGGTCAATTCACGGCGCGGTGAAGAAGACAGTGCACCTTGG 257  
 Db 101 GlnAspGluGluGlu-----GlnGlnGlnAspSerAspLeuTrp 113  
 QY 256 AAGCTTTTAAAGTGTGACTTGAATGGGATGGGTTGGGGGGATGTGAGGAGCTTGA 197  
 Db 114 GluAlaPheLysValPheAspGluAsnGlyAspGlyTyrIleSerAlaLysGluLeuGln 133  
 QY 196 TACGTGCTGGCAAGACTGGGTATGTGAGGTCAAAATAGTGAAGAAAGACTGCAGGAGCATG 137  
 Db 134 MetValLeuGlyLysLeuGlyLeuValGluGlyAsnLeuMetAspAsnValHisArgMet 153  
 QY 136 ATTTGGTATTACGACACCAATTCAGACGGCATGTTGATTTTCAAGAAATTCAAAACATG 77  
 Db 154 IleGlySerValAspThrAsnHisAspGlyArgValAspPheAspGluPheLysGluMet 173  
 QY 76 ATG 74  
 Db 174 Met 174

RESULT 5  
 US-10-437-963-182194  
 ; Sequence 182194, Application US/10437963  
 ; Publication No. US20040123343A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa, Thomas J.  
 ; APPLICANT: Kovalic, David K.  
 ; APPLICANT: Zhou, Yihua  
 ; APPLICANT: Cao, Yongwei  
 ; APPLICANT: Wu, Wei  
 ; APPLICANT: Boukharov, Andrey A.  
 ; APPLICANT: Barbazuk, Brad  
 ; APPLICANT: Li, Ping  
 ; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53221)B  
 ; CURRENT APPLICATION NUMBER: US/10/437,963  
 ; CURRENT FILING DATE: 2003-05-14  
 ; NUMBER OF SEQ ID NOS: 204966  
 ; SEQ ID NO 182194  
 ; LENGTH: 196  
 ; TYPE: PRT  
 ; ORGANISM: Oryza sativa  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT4530\_79404C.1.pep  
 US-10-437-963-182194

Alignment Scores:  
 Pred. No.: 9,87e-19 Length: 196  
 Score: 259.50 Matches: 68  
 Percent Similarity: 50.81% Conservative: 26  
 Best Local Similarity: 36.76% Mismatches: 54  
 Query Match: 24.46% Indels: 37  
 DB: 16 Gaps: 6

US-10-021-323-13 (1-609) x US-10-437-963-182194 (1-196)

QY 550 AAAATGTCCCC----- 539

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|||||
Db 14 LysMetSerProGlyAlaGlyAlaGlySerLysLysLysGlnGlnGln 33
QY 538 CTTAGTAAGACCGACTTGCACCGCTATTCGAGAGCTCGACAGAAATGAGATGGCTTC 479
Db 34 AlaAspAlaAlaGluLeuAlaArgValPheGluLeuPheAspArgAsnGlyAspGlyArg 53
QY 478 GTTAGTCTGAGGAGCTGAAATGTTGCTCTCAGAGAATCGGTCTGTCGAATTCAGCCTT 419
Db 54 IleThrArgGluGluLeuGluAspSerLeuGlyLysLeuGly----IleProValProAla 72
QY 418 GAGAATTCGAGCCCTTAGTG-----GMAAAACCATGTTTGAACCTG 377
Db 73 AspGluLeuAlaAlaValIleAlaArgIleAspAlaAsnGlyAspGlyCysValAspVal 92
QY 376 GATGAATCTTGTCTTTTATGAAATCCATCCGAAACCACTGGCACAATGGTGGTGACGAA 317
Db 93 GluGluPheGlyGluLeuTyrArgSerIle-----MetAlaGlyGlyAspAspSer 109
QY 316 GAGGAG-----GAGGAGGAATTCGTCATTCACCGCGCGGTGGAAGAAGAGAC 269
Db 110 LysAspGlyArgAlaLysGluGluGlu-----GluGluGluAsp 122
QY 268 AGTGAACCTTCGGAAGCTTTTAAAGTGTTCGACTTGAATCGCGATGGGTTGGCGGATGT 209
Db 123 GlyAspMetArgGluAlaPheArgValPheAspAlaAsnGlyAspGlyTyrIleThrVal 142
QY 208 GAGGAGCTTGAATACGTCTGCGGAAGACGTGGTATGAGGTGAAATAGTGGAAAGAGAC 149
Db 143 AspGluLeuGlyAlaValLeuAlaSerLeuGlyLeuLysGlnGlyArgThrAlaGluGlu 162
QY 148 TSCAGAGCATGATTTGGTATTACGACCAATTCAGACGCGCATGTTGATTTTCAAGAA 89
Db 163 CysArgArgMetIleGlyGlnValAspArgAspGlyArgValAspPheHisGlu 182
QY 88 TTCAAAAACATGATG 74
Db 183 PheLeuGlnMetMet 187

```

## RESULT 6

```

US-10-424-599-166315
; Sequence 166315, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 166315
; LENGTH: 212
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_121198C.1.pap
US-10-424-599-166315

```

```

Alignment Scores:
Pred. No.: 3 94e-18 Length: 212
Score: 254.00 Matches: 60
Percent Similarity: 55.15% Conservative: 31
Best Local Similarity: 36.36% Mismatches: 48
Query Match: 23.94% Indels: 23 26
DB: 12 Gaps: 4

```

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US-10-021-323-13 (1-609) x US-10-424-599-166315 (1-212)

```

```

QY 550 AAAATGTCCTCCCTTAGTAAGACCGACTTGCACCGCTATTCGAGAAGCTCGACAAGAT 491

```

```

|||||
Db 59 LysArgThrThrMetAspProAsnGluLeuLysArgValPheGlnMetPheAspArgAsn 78
QY 490 GGAGATGGCTTCTGTTAGTCTGGAGGAGCTCAATTTGGTTGCTCCAGAGAAATCGGCTCTGTC 431
Db 79 GlyAspGlyArgIleThrLysLysGluLeuAsnAspSerLeuGlnAsnLeuGly----Ile 97
QY 430 CAATTCAGCCCTTGAAGAATTTGGAGCCCTTAGTG-----GGAAAAACCA 389
Db 98 PheIleProAspLysGluLeuGlyGlnMetIleGluArgIleAspValAsnGlyAspGly 117
QY 388 TGTTCGAACTTCGATGAATTTCTTCTTTTATGAAATCCATTCGAACCCACTGGCACAT 329
Db 118 CysValAspIleAspGluPheGlyGluLeuTyrGlnThrIleMet----- 132
QY 328 GGTGTGTCACCAAGAGGAGGAGGAGGAAATTCGTCATTCACGCGCGCGGTGGAAGAAGAGAC 269
Db 133 -----AspGluArgAspGluGluGlu----- 139
QY 268 AGTGACCTTCGAGAGCTTTTAAAGTGTTCGACTTGAATCGGAGATGGGTTGGGGGATGT 209
Db 140 ---AspMetArgGluAlaPheAsnValPheAspGlnAsnAlaAspGlyPheIleThrVal 158
QY 208 GAGGAGCTTGAATACGTCTGCGGAAGACTCGGTATGTGAGGTGAAATAGTGGAAAGAGAC 149
Db 159 AspGluLeuArgThrValLeuSerSerLeuGlyLeuLysGlnGlyArgThrValGlnAsp 178
QY 148 TSCAGAGCATGATTTGGTATTACGACCAATTCAGACGCGCATGTTGATTTTCAAGAA 89
Db 179 CysLeuAsnMetIleSerLysValAspValAspGlyAspGlyMetValAspPheLysGlu 198
QY 88 TTCAAAAACATGATG 74
Db 199 PheLysGlnMetMet 203

```

## RESULT 7

```

US-10-424-599-166314
; Sequence 166314, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 166314
; LENGTH: 150
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_121197C.1.pap
US-10-424-599-166314

```

```

Alignment Scores:
Pred. No.: 3 24e-17 Length: 150
Score: 245.00 Matches: 57
Percent Similarity: 56.05% Conservative: 31
Best Local Similarity: 36.31% Mismatches: 43
Query Match: 23.09% Indels: 26
DB: 12 Gaps: 4

```

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US-10-021-323-13 (1-609) x US-10-424-599-166314 (1-150)

```

```

QY 526 GACTTCGACCGCTATTCGAGAAGCTCGACAAGATGAGATGGCTTCGTTAGTCTGGAG 467
Db 5 GluLeuLysArgValPheGlnMetPheAspArgAsnGlyAspGlyArgIleThrLysLys 24
QY 466 GAGCTGAATGTTGCTCCAGAGATCGGCTCTGTCCCAATTCAGCCTTGAAGAATTGGAG 407

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Db 25 GluLeuAenAspSerLeuGluAenLeuGly---IlePheIleSerAspLysAspLeuSer 43
QY 406 CCCTTAGTG-----GGAACCACTGTTGAACTTGGATGAAATCTTG 365
Db 44 GlnMetIleGlnArgIleAspValAsnGlyAspGlyCysValAspMetAspGluPheGly 63
QY 364 TTCTTTATGAATCCTCATCTCGAACCCACTGGCACATGGTGAGACAGAGAGGAGGAG 305
Db 64 GluLeuTyrGlnThrIleMet-----AspGluArgAspAsnGlu 76
QY 304 GAATTTGTCATTACAGCGCGCGGTGAAGAAGAGACAGTGCCTTGGCAAGGCTTTTAAA 245
Db 77 Glu-----AspMetArgGluAlaPheAsn 84
QY 244 GTGTTTGAATGATGGGATGGTGGGGGATGTGAGAGCTTGAATAGTGTGCGGA 185
Db 85 ValPheAspGlnAenAlaAspGlyPheIleThrValAspGluLeuArgThrValLeuSer 104
QY 184 AGACTGGGTATGTGAGGTGAATAAGTGAAGAAAGACTGCAGGAGCATGATTTGGTATTAC 125
Db 105 SerLeuGlyLeuLysGlnGlyArgThrValGlnAspCysLysAlaMetCileSerLysVal 124
QY 124 GACACCAATTCAGACGGCATGTTGATTTTCAAGAATTCAAAAACATCATG 74
Db 125 AspValAspGlyAspGlyMetValAspTyrLysGluPheLysGlnMetMet 141

```

RESULT 8

```

US-10-437-963-123218
; Sequence 123218, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 123218
; LENGTH: 172
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_26074C.1.pep
US-10-437-963-123218

```

```

Alignment Scores:
Pred. No.: 6,29e-17 Length: 172
Score: 242.50 Matches: 59
Percent Similarity: 52.76% Conservative: 27
Best Local Similarity: 36.20% Mismatches: 68
Query Match: 22.86% Indels: 9
DB: 16 Gaps: 3

```

```

US-10-021-323-13 (1-609) x US-10-437-963-123218 (1-172)
QY 538 CTTAGTAACACCGACTTGAACCGGATTCGAGAGCTGCAAGAATGAGATGCTTC 479
Db 1 MetAspSerThrGluLeuArgLysValPheLysMetPheAspLysAsnGlyAspGlyArg 20
QY 478 GTTAGTCTCGAGAGCTGGAATGTTGTCCTCAGAGATCGGCTCTCCAAATTCAGCCCTT 419
Db 21 IleThrLysLysGluLeuGlyGluSerPheLysAsnPheGly---IlePheIleProAsp 39
QY 418 GAAGAATTGGAGCCCTTAGTG-----GGAACCACTGTTTGAACCTTG 377

```

```

Db 40 AspGluLeuAenAspAlaThrMetAspLysIleAspAlaAsnGlyAspGlyCysValAspVal 59
QY 376 GATGAATCTTCTTCTTTATGAATCCATCTCGAACCCACTGCACATCGTGTGACGAA 317
Db 60 GluGluPheGlyLeuLeuTyrArgSerIleLeuGlyAspAspAlaAlaGlyArgAlaPro 79
QY 316 GAGGAGGAGGAGAAATGCTCATTCACCGCGCGCGT-----GAAGAAGAAGACAGTGCAC 263
Db 80 ArgThrAlaAlaAlaIleGlyGluGlyAlaProAspAspGluAspGluGly 99
QY 262 CTTCGGAAGCGCTTTAAAGCTTTTACCTTGAATCGGATCGGCTTGGGGGAGATGTGAGGAG 203
Db 100 MetArgGluAlaPheAsnValPheAspGlnAsnGlyAspGlyPheIleThrValAspGlu 119
QY 202 CTTGAATACGCTCTGGGAGAGACTGGGTATGTGAGGTGAATAATAGTGGAAAAGACTGCAGG 143
Db 120 LeuArgSerValLeuSerSerLeuGlyLeuLysHisGlyArgThrAlaAspAspCysArg 139
QY 142 AGCATGATTTGTTATACGACACCAATTCAGACGGCATGTTGATTTTCAAGAATTCAAA 83
Db 140 ArgMetIleSerMetValAspAlaAspGlyAspGlyArgValAspPheLysGluPheLys 159
QY 82 AACATGATG 74
Db 160 GlnMetMet 162

```

RESULT 9

```

US-10-424-599-204757
; Sequence 204757, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 204757
; LENGTH: 150
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_26924C.1.pep
US-10-424-599-204757

```

```

Alignment Scores:
Pred. No.: 7,69e-17 Length: 150
Score: 241.50 Matches: 59
Percent Similarity: 54.88% Conservative: 31
Best Local Similarity: 35.98% Mismatches: 45
Query Match: 22.76% Indels: 29
DB: 12 Gaps: 5

```

```

US-10-021-323-13 (1-609) x US-10-424-599-204757 (1-150)
QY 547 ATGTCCCTTCTAGTAGTAAGACCGACTTGCACCGGATTCGAGAGCTGCAAGAATGGA 488
Db 1 MetAspProMet-----GluLeuLysArgValPheGlnMetPheAspArgAsnGly 17
QY 487 GATGGCTTCTAGTCTGAGAGAGCTGAAATGTTGTCCTCAGAGATCGGCTCTGTCCTCA 428
Db 18 AspGlyArgIleSerLeuLysGluLeuSerAspSerLeuGluAsnLeuGly---IleLeu 36
QY 427 TTCAGCTTGAAGAATTCGAGCCCTTAGTG-----GGAACCACTGATGT 386
Db 37 IleProAspLysAspLeuAlaGlnMetIleGluArgIleAspValAsnGlyAspGlyCys 56
QY 385 TTGAACCTTGATGAATCTTCTTCTTTTATGATCCATCTCGAACCCACTGCGCACATGTT 326

```





QY 202 CTTGAATACGCTGCGGAGAGCTGGGTATGTGAGGTGAAATATGATGGAAAGAC---TGC 146  
 Db 155 LeuGlnMetValLeuGlyLysLeuGlyPhe---SerGluGlySerGluIleAspArgVal 173  
 QY 145 AGCAGCATGATTTGGTATTACGACACCAATTCACAGCGCATGTTGATTTTCAAGAAATTC 86  
 Db 174 GluIysMetIleValSerValAspSerAsnArgAspGlyArgValAspPheGluPhe 193  
 QY 85 AAAAAACATGATG 74  
 Db 194 LysAspMetMet 197

RESULT 12  
 US-10-424-599-148206  
 ; Sequence 148206, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa Thomas J  
 ; APPLICANT: Kovalic David K  
 ; APPLICANT: Zhou Yihua  
 ; APPLICANT: Cao Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 148206  
 ; LENGTH: 212  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_104852C.1.pap  
 US-10-424-599-148206

Alignment Scores:  
 Pred. No.: 1,6e-16 Length: 212  
 Score: 239.00 Matches: 64  
 Percent Similarity: 56.17% Conservative: 27  
 Best Local Similarity: 39.51% Mismatches: 61  
 Query Match: 22.53% Indels: 10  
 DB: 12 Gaps: 5

US-10-021-323-13 (1-609) x US-10-424-599-148206 (1-212)

QY 544 TCCCCCTTAGTAAGACCGACTTGCACCGGTATTCGAGAAGCTCGACAAAGATGGAGAT 485  
 Db 50 SerGlnLysLysLysGluGluLeuArgLysLeuPheSerThrPheAspLysAsnGlyAsp 69  
 QY 484 GCGTCTGTAGTCGAGGAGCTGAATTTGCTTCCAGAGATCGGTCGTCCCAATTC 425  
 Db 70 GlyPheIleThrLysGlnGluLeuArgGluSerLeuArgAsnIleGly---IlePheMet 88  
 QY 424 AGCTTTGAAGAAATTTGAGCCCTTAGTGGGAAACCAATTTGAACTTGGATGAATTCCTG 365  
 Db 89 AlaAspLysGluValAspAspIleValLysTyrAspSerAsnSerAspGlyLeuIle 108  
 QY 364 TTTCTTTATGAA---TCCATCTCGAACCCACTGGCAGCATGTGTGTGACGAGAGGAG 308  
 Db 109 AspPheGluGluPheCysLeuLeuThrSerGluCysValGlyGlyAspHisHisGluLys 128  
 QY 307 GAGGATTTGTCATTACGGGGGCG---GGTGAAGAAGACAGCATGTGACCTTGGCAAG 254  
 Db 129 Glu-----GlyGlyValMetGlyAsnGluGlu---ValAspLeuLysGlu 142  
 QY 253 GCTTTTAAAGTGTTCGACTTGAATGGCGATGGGTGGGGGAGTGTGAGAGGCTTGAATAC 194  
 Db 143 AlaPheAspValPheAspLysAspAsnAspGlyLeuIleSerValGluGluLeuAlaLeu 162  
 QY 193 GTCTGGGAAGACATGGGTATGTGAGGTGAAATATGATGCGAAAGACTCAGAGCATGATT 134  
 Db 163 ValLeuThrSerLeuGlyLeuArgGluGlyArgLysIleGluGluCysLysGluMetIle 182

QY 133 TGGTATTACGACACCAATTCAGACGGCATGTTGATTTTCAAGAAATTCAAAAACATGATG 74  
 Db 183 LysLysValAspMetAspGlyAspGlyMetValAsnPheAsnGluPheLysArgMetMet 202  
 QY 73 TTACAT 68  
 Db 203 MetAsn 204

RESULT 13  
 US-10-424-599-222472  
 ; Sequence 222472, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa Thomas J  
 ; APPLICANT: Kovalic David K  
 ; APPLICANT: Zhou Yihua  
 ; APPLICANT: Cao Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 222472  
 ; LENGTH: 150  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_42921C.1.pap  
 US-10-424-599-222472

Alignment Scores:  
 Pred. No.: 3.83e-16 Length: 150  
 Score: 235.00 Matches: 57  
 Percent Similarity: 54.66% Conservative: 31  
 Best Local Similarity: 35.40% Mismatches: 47  
 Query Match: 22.15% Indels: 26  
 DB: 12 Gaps: 4

US-10-021-323-13 (1-609) x US-10-424-599-222472 (1-150)

QY 538 CTTAGTAAGACCGACTTGCACCGGTATTCGAGAAGCTCGACAAAGATGGAGATGGCTTC 479  
 Db 1 MetAspProAlaGluLeuLysArgValPheGlnLeuPheAspArgAsnGlyAspGlyArg 20  
 QY 478 GTTAGTCTGGAGGAGCTGAATTTGCTTCTCAGAGAATTCGGG----- 437  
 Db 21 IleSerLeuLysGlnLeuSerAspSerLeuGluAsnLeuGlyIleLeuIleProAspLys 40  
 QY 436 TCTGTCCAATTCAGCCCTTGAAGATTCGAGCCCTTAGTGGGAAACCAATTTGAACCTTG 377  
 Db 41 AspLeuAlaGlnMetIleGluArgIleAsp---MetAsnGlyAspGlyCysIleAspVal 59  
 QY 376 GATGAATTTCTTCTTTTATGAATCCATTCGAAACCCACTGGCAGCATGTGTGTGACGAA 317  
 Db 60 AspGluPheGlyAspLeuLysGluSerIleMet-----GluGlu 72  
 QY 316 GAGGAGGAGGAGGAATTTGTCATTCACGGCGCGGTGAAGAAGACAGTGAACCTTCGCG 257  
 Db 73 ProAspGluGluGlu-----AspMetArg 80  
 QY 256 AAGCTTTTAAAGTGTTCGACTTGAATGGGATGGGTGGGGGATGTGAGGAGCTTGAA 197  
 Db 81 GluAlaPheAsnValPheAspGlnAsnArgAspGlyPheIleThrValGluGluLeuGly 100  
 QY 196 TACGTCTCGGAAAGACTCGGCTGTGTGAGGTGAAATATGCGAAAGACTCAGGAGCATG 137  
 Db 101 ThrValLeuAlaSerLeuGlyLeuLysGlnGlyArgThrLeuAspGluCysLysLeuMet 120  
 QY 136 ATTGTGTTATTCAGCACCAATTCAGAGCGCATGTGTTGATTTTCAAGAAATTCAAAAACATG 77  
 Db 121 IleMetLysValAspValAspGlyAspGlyMetValAsnTyrLysGluPheArgGlnMet 140





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Search completed: July 29, 2004, 09:29:58  
Job time : 49.5 secs